RAC AGENDA – November 2017

Revised November 2, 2017

1. Approval of Agenda
   - RAC Chair

2. Approval of Minutes
   - RAC Chair

3. Old Business
   - RAC Chair

4. Regional Update — **INFORMATIONAL**
   - DWR Regional Supervisor

5. Waterfowl Recommendations and Rule Amendments - 2018 — **ACTION**
   - Blair Stringham, Waterfowl Program Coordinator

6. R657-19 – Taking of Non-game Mammals Rule Amendment — **ACTION**
   - Jessica Van Woeart, Utah Prairie Dog Wildlife Biologist

7. Bucks, Bulls & OIAL 2018 Season Dates, Application Timeline — **ACTION**
   - Covy Jones, Big Game Coordinator

8. R657-5 – Taking Big Game Rule Amendments — **ACTION**
   - Covy Jones, Big Game Coordinator

9. R657-71 - Removal of Wild Mule Deer from Domesticated Elk Facilities — **ACTION**
   - Covy Jones, Big Game Coordinator

10. Statewide Pronghorn Management Plan — **ACTION**
    - Randy Larsen, Wildlife Research Coordinator

11. Statewide Moose Management Plan — **ACTION**
    - Kent Hersey, Big Game Projects Coordinator

12. NR Deer Management Plans — **ACTION**
    - Jim Christensen, Northern Region Asst. Wildlife Manager

~~13. Mineral Mountain Bighorn Sheep Management Plan — **ACTION**~~
~~- Dave Smedley, Wildlife Biologist~~

14. CWMU Management Plans and Permit Numbers for 2018 — **ACTION**
    - Mike Wardle, Public Wildlife/Private Lands Coordinator

15. Landowner Association Permit Numbers for 2018 — **ACTION**
    - Mike Wardle, Public Wildlife/Private Lands Coordinator

16. R657-67 – Mentor Rule Amendments — **ACTION**
    - Phil Gray, Licensing Coordinator

Meeting Locations

CR RAC – Nov. 7th 6:30 PM
Springville Junior High "cafetorium"
189 S 1470 E, Springville

NR RAC – Nov. 8th 6:00 PM
Academy Conference Center
58 N. Main St., Brigham City

SR RAC – Nov. 14th 5:00 PM
Cedar City Middle School
2215 W. Royal Hunte Dr, Cedar

SER RAC – Nov. 15th 6:30 PM
John Wesley Powell Museum
1765 E. Main St, Green River

NER RAC – Nov. 16th 6:30 PM
Wildlife Resources NER Office
318 North Vernal Ave., Vernal

Board Meeting – Nov. 30 - 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
MICHAL D. FOWLKS
Division Director

MEMORANDUM

Date: October 19, 2017

To: Wildlife Board and Regional Advisory Council Members

From: Blair Stringham, Migratory Game Bird Program Coordinator

Subject: 2018-19 WATERFOWL AND UINTAH COUNTY SANDHILL CRANE HUNT RECOMMENDATIONS

Specific season and bag recommendations for the 2018-2019 Utah waterfowl season and Uintah County sandhill crane hunt are as follows:

Youth Day
Northern Zone: 9/22/2018
Southern Zone: 9/29/2018

Duck/Coot/Merganser (7 bird bag / 21possession; 2 female mallard, 2 redhead, 2 wood duck, 2 pintail, 2 canvasback, 3 scaup)
Northern Zone: 10/6/2018 – 1/19/2019
Northern Scaup: 10/6/2018 – 12/30/2018
Southern Zone: 10/13/2018 – 1/26/2019
Southern Scaup: 11/2/2018 – 1/26/2019

Dark Goose (4 bird bag / 12 possession)
Eastern Box Elder Zone: 10/6/2018 – 1/19/2019
Northern Zone: 10/6/2018 – 10/18/2018; 10/27/2018 – 1/27/2019
Southern Zone: 10/13/2018 – 1/26/2019
Wasatch Front Zone: 10/6/2018 – 10/18/2018; 11/3/2018 – 2/3/2019

Light Goose (20 bird bag / 60 possession)
Statewide: 10/25/2018 – 11/30/2018; 1/1/2019 – 3/10/2019
- Closed in Millard County from February 15 – February 28

Snipe (8 bird bag / 24 possession; season dates same as duck zone)

Falconry (3 bird bag / 9 possession; season dates same as duck zone)

1594 West North Temple, Suite 2110, PO Box 146301, Salt Lake City, UT 84114-6301
telephone (801) 538-4700 • facsimile (801) 538-4709 • TTY (801) 538-7458 • *www.wildlife.utah.gov*

Swan (2000 total permits)
Season: 10/6/2018 – 12/9/2018

Sandhill Crane (changes only being made to the Uintah County Hunt Dates)
Season 1: September 29 – October 18, 2018
Season 2: October 19 – November 7, 2018
Season 3: November 8 – November 28, 2018

We are proposing to amend Rule R657-9 to:

1) Redefine the definition of motor vehicle.
2) Clarify definitions and terms.

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.

R657-9-2. Definitions.

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

(2) In addition:

(a) "Bait" means shelled, shucked or unshucked corn, wheat or other grain, salt or other feed that lures, attracts or entices birds.

(b) "Baiting" means the direct or indirect placing, exposing, depositing, distributing, or scattering of salt, grain, or other feed that could serve as a lure or attraction for migratory games birds to, on, or over any areas where hunters are attempting to take them.

(c) "CFR" means the Code of Federal Regulations.

(d) "Daily Bag Limit" means the maximum number of migratory game birds of a single species or combination (aggregate) of species permitted to be taken by one person in any one day during the open season in any one specified geographic area for which a daily bag limit is prescribed.

(e) "Dark geese" means the following species: cackling, Canada, white-fronted and brant.

(f) "Light geese" means the following species: snow, blue and Ross'.

(g) "Live decoys" means tame or captive ducks, geese or other live birds.

(h) "Off-highway vehicle" means any motor vehicle designed for or capable of travel over unimproved terrain.

(i) "Permanent waterfowl blind" means any waterfowl blind that is left unattended overnight and that is not a portable structure capable of immediate relocation.

(j) "Possession limit" the maximum number of migratory game birds of a single species or a combination of species permitted to be possessed by any one person when lawfully taken in the United States in any one specified geographic area for which a possession limit is prescribed.

(k) "Sinkbox" means any type of low floating device, having a depression, affording the hunter a means of concealment beneath the surface of the water.

(l) "Transport" means to ship, export, import or receive or deliver for shipment.

(m) "Waterfowl" means ducks, mergansers, geese, brant and swans.

(n) "Waterfowl blind" means any manufactured place of concealment, including boats, rafts, tents, excavated pits, or similar structures, which have been designed to partially or completely conceal a person while hunting waterfowl.

R657-9-3. Stamp Requirements.

(1) Any person 16 years of age or older may not hunt waterfowl without first obtaining a federal migratory bird hunting and conservation stamp, and having the stamp in possession.

(2) The stamp must be validated by the hunter's signature in ink across the face of the stamp.

(3) A federal migratory bird hunting and conservation stamp is not required for any person under the age of 16.

R657-9-4. Permit Applications for Swan.

(1) Swan permits will be issued pursuant to R657-62-22

R657-9-5. Tagging Swans.

(1) The carcass of a swan must be tagged before the carcass is moved from or the hunter leaves the site of kill as provided in Section 23-20-30.

(2) A person may not hunt or pursue a swan after the notches have been removed from the tag or the tag has been detached from the permit.

R657-9-6. Return of Swan Harvest and Hunt Information.

(1) Swan permit holders who do not hunt or are unsuccessful in taking a swan must respond to the swan questionnaire through the division's Internet address, or by telephone, within 30 calendar days of the conclusion of the prescribed swan hunting season.

(2) Within three days of harvest, swan permit holders successful in taking a swan must personally present the swan or its head for measurement to the division or the Bear River Migratory Bird Refuge and further provide all harvest information requested by the division or Refuge.

(3) Hunters who fail to comply with the requirements of Subsections (1) or (2) shall be ineligible to:

(a) obtain a swan permit the following season; and

(b) obtain a swan permit after the first season of ineligibility until the swan orientation course is retaken.

(4) late swan questionnaires may be accepted pursuant to Rule R657-42-9(3). Swan permit holders are still required to present the swan or its head for measurement to a division office.

R657-9-7. Authorized Weapons.

(1) Migratory game birds may be taken with a shotgun, crossbow or archery tackle, including a draw lock.

(2) Migratory game birds may not be taken with a trap, snare, net, rifle, pistol, swivel gun, shotgun larger than 10 gauge, punt gun, battery gun, machine gun, fish hook, poison, drug, explosive or stupefying substance.

(3) Migratory game birds may not be taken with a shotgun of any description capable of holding more than three shells, unless it is plugged with a one-piece filler, incapable of removal without disassembling the gun, so its total capacity does not exceed three shells, except as authorized by the Wildlife Board and specified in the guidebook of the Wildlife Board for taking Waterfowl, Wilson’s snipe and Coot.

R657-9-8. Nontoxic Shot.

(1) Only nontoxic shot may be in possession or used while hunting waterfowl and coot.

(2) A person may not possess or use lead shot:

(a) while hunting waterfowl or coot in any area of the state;

(b) on federal refuges;

(c) on the following waterfowl management areas: Bicknell Bottoms, Blue Lake, Brown's Park, Clear Lake, Desert Lake, Farmington Bay, Harold S. Crane, Howard Slough, Locomotive Springs, Manti Meadow, Mills Meadows, Ogden Bay, Powell Slough, Public Shooting Grounds, Salt Creek, Stewart's Lake, Timpie Springs; or

(d) on the Scott M. Matheson or Utah Lake wetland preserve.

R657-9-9. Use of Weapons on State Waterfowl Management Areas.

(1) A person may not discharge a firearm, crossbow, or archery tackle on the Bicknell Bottoms, Blue Lake, Brown's Park, Clear Lake, Desert Lake, Farmington Bay, Harold S. Crane, Howard Slough, Locomotive Springs, Mills Meadows, Ogden Bay, Powell Slough, Public Shooting Grounds, Salt Creek, Stewart's Lake, Timpie Springs and Topaz Waterfowl Management areas during any time of the year, except:

(a) the use of authorized weapons as provided in Utah Admin. Code R657-9-7 during waterfowl hunting seasons for lawful hunting activities;

(b) as otherwise authorized by the Division in special use permit, certificate of registration, administrative rule, proclamation, or order of the Wildlife Board; or

(c) for lawful purposes of self-defense.

R657-9-10. Airborne, Terrestrial, and Aquatic Vehicles.

Migratory game birds may not be taken:

(1) from or by means of any motorboat or other craft having a motor attached, or sailboat unless the motor has been completely shut off or sails furled and its progress has ceased: provided, that a craft under power may be used to retrieve dead or crippled birds; however, crippled birds may not be shot from such craft under power; or

(2) by means or aid of any motor driven land, water or air conveyance, or any sailboat used for the purpose of or resulting in the concentrating, driving, rallying or stirring up of any migratory bird.

R657-9-11. Airboats.

(1) Air-thrust or air-propelled boats and personal watercraft are not allowed in designated parts of the following areas for the purposes of waterfowl [~~management or federal refuge areas~~]hunting:

(a) Box Elder County: Box Elder Lake, Bear River, that part of Harold S. Crane within one-half mile of all dikes and levees, Locomotive Springs, Public Shooting Grounds and Salt Creek, that part of Bear River Migratory Bird Refuge north of "D" line dike, and outside Units 1, 3, 4 and 5 as posted.

(b) Daggett County: Brown's Park

(c) Davis County: Howard Slough, Ogden Bay and Farmington Bay within diked units or as posted

(d) Emery County: Desert Lake
(e) Millard County: Clear Lake, Topaz Slough
(f) Tooele County: Timpie Springs
(g) Uintah County: Stewart's Lake
(h) Utah County: Powell Slough
(i) Wayne County: Bicknell Bottoms
(j) Weber County: Ogden Bay within diked units or as posted and the portion of Harold S. Crane Waterfowl Management Area that falls within the county line.

(2) "Personal watercraft" means a motorboat that is:
(a) less than 16 feet in length;
(b) propelled by a water jet pump; and
(c) designed to be operated by a person sitting, standing or kneeling on the vessel, rather than sitting or standing inside the vessel.

R657-9-12. Motorized Vehicle Access.

(1) Motorized vehicle 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, 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.

([~~2~~]3) Off-highway vehicles are not permitted on state waterfowl management areas, except as marked and posted open.

([~~3~~]4) Off-highway vehicles are not permitted on Bear River Migratory Bird Refuge.

([~~4~~]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.

R657-9-13. Sinkbox.

A person may not take migratory game birds from or by means, aid, or use of any type of low floating device, having a depression affording the hunter a means of concealment beneath the surface of the water.

R657-9-14. Live Decoys.

A person may not take migratory game birds with the use of live birds as decoys or from an area where tame or captive live ducks or geese are present unless such birds are and have been, for a period of ten consecutive days prior to such taking, confined within an enclosure which substantially reduces the audibility of their calls and totally conceals such birds from the sight of wild migratory waterfowl.

R657-9-15. Amplified Bird Calls.

A person may not use recorded or electrically amplified bird calls or sounds or recorded or electronically amplified imitations of bird calls or sounds except as authorized by the Wildlife Board and specified in the guidebook of the Wildlife Board for taking waterfowl, Wilson's snipe and coot.

R657-9-16. Baiting.

(1) A person may not take migratory game birds by the aid of baiting, or on or over any baited area where a person knows or reasonably should know that the area is or has been baited. This section does not prohibit:

(a) the taking of any migratory game bird on or over the following lands or areas that are not otherwise baited areas:

(i) standing crops or flooded standing crops (including aquatics), standing, flooded or manipulated natural vegetation, flooded harvested croplands, or lands or areas where seeds or grains have been scattered solely as the result of a normal agricultural planting, harvesting, post-harvest manipulation or normal soil stabilization practice;

(ii) from a blind or other place of concealment camouflaged with natural vegetation;

(iii) from a blind or other place of concealment camouflaged with vegetation from agricultural crops, as long as such camouflaging does not result in the exposing, depositing, distributing or scattering of grain or other feed; or

(iv) standing or flooded standing agricultural crops where grain is inadvertently scattered solely as a result of a hunter entering or exiting a hunting area, placing decoys or retrieving downed birds.

(b) The taking of any migratory game bird, except waterfowl, coots and cranes, is legal on or over lands or areas that are not otherwise baited areas, and where grain or other feed has been distributed or scattered solely as the result of manipulation of an agricultural crop or other feed on the land where grown or solely as the result of a normal agricultural operation.

R657-9-17. Possession During Closed Season.

No person shall possess any freshly killed migratory game birds during the closed season.

R657-9-18. Live Birds.

(1) Every migratory game bird wounded by hunting and reduced to possession by the hunter shall be immediately killed and become part of the daily bag limit.

(2) No person shall at any time, or by any means possess or transport live migratory game birds.

R657-9-19. Waste of Migratory Game Birds.

(1) A person may not waste or permit to be wasted or spoiled any protected wildlife or any part of them.

(2) No person shall kill or cripple any migratory game bird pursuant to this rule without making a reasonable effort to immediately retrieve the bird and include it in that person's daily bag limit.

R657-9-20. Termination of Possession.

Subject to all other requirements of this part, the possession of birds taken by any hunter shall be deemed to have ceased when the birds have been delivered by the hunter to another person as a gift; to a post office, a common carrier, or a migratory bird

preservation facility and consigned for transport by the Postal Service or common carrier to some person other than the hunter.

R657-9-21. Tagging Requirement.

(1) No person shall put or leave any migratory game bird at any place other than at that person's personal abode, or in the custody of another person for picking, cleaning, processing, shipping, transporting or storing, including temporary storage, or for the purpose of having taxidermy services performed unless there is attached to the birds a disposal receipt, donation receipt or transportation slip signed by the hunter stating the hunter's address, the total number and species of birds, the date such birds were killed and the Utah hunting license number under which they were taken.

(2) Migratory game birds being transported in any vehicle as the personal baggage of the possessor shall not be considered as being in storage or temporary storage.

R657-9-22. Donation or Gift.

No person may receive, possess or give to another, any freshly killed migratory game birds as a gift, except at the personal abodes of the donor or donee, unless such birds have a tag attached, signed by the hunter who took the birds, stating such hunter's address, the total number and species of birds taken, the date such birds were taken and the Utah hunting license number under which taken.

R657-9-23. Custody of Birds of Another.

No person may receive or have in custody any migratory game birds belonging to another person unless such birds are tagged as required by Section R657-9-21.

R657-9-24. Species Identification Requirement.

No person shall transport within the United States any migratory game birds unless the head or one fully feathered wing remains attached to each bird while being transported from the place where taken until they have arrived at the personal abode of the possessor or a migratory bird preservation facility.

R657-9-25. Marking Package or Container.

(1) No person shall transport by the Postal Service or a common carrier migratory game birds unless the package or container in which such birds are transported has the name and address of the shipper and the consignee and an accurate statement of the numbers and kinds of species of birds contained therein clearly and conspicuously marked on the outside thereof.

(2) A Utah shipping permit obtained from the division must accompany each package shipped within or from Utah.

R657-9-26. Migratory Bird Preservation Facilities.

(1) Migratory bird preservation facility means:

(i) Any person who, at their residence or place of business and for hire or other consideration; or

(ii) Any taxidermist, cold-storage facility or locker plant which, for hire or other consideration; or

(iii) Any hunting club which, in the normal course of operations; receives, possesses, or has in custody any migratory game birds belonging to another person for purposes of picking, cleaning, freezing, processing, storage or shipment.

(2) No migratory bird preservation facility shall:

(a) receive or have in custody any migratory game bird unless accurate records are maintained that can identify each bird received by, or in the custody of, the facility by the name of the person from whom the bird was obtained, and show:

(i) the number of each species;

(ii) the location where taken;

(iii) the date such birds were received;

(iv) the name and address of the person from whom such birds were received;

(v) the date such birds were disposed of; and

(vi) the name and address of the person to whom such birds were delivered; or

(b) destroy any records required to be maintained under this section for a period of one year following the last entry on record.

(3) Record keeping as required by this section will not be necessary at hunting clubs that do not fully process migratory birds by removal of the head and wings.

(4) No migratory bird preservation facility shall prevent any person authorized to enforce this part from entering such facilities at all reasonable hours and inspecting the records and the premises where such operations are being carried out.

R657-9-27. Importation.

A person may not:

(1) import migratory game birds belonging to another person; or

(2) import migratory game birds in excess of the following importation limits:

(a) From any country except Canada and Mexico, during any one calendar week beginning on Sunday, not to exceed 10 ducks, singly or in the aggregate of all species, and five geese including brant, singly or in the aggregate of all species;

(b) From Canada, not to exceed the maximum number to be exported by Canadian authorities;

(c) From Mexico, not to exceed the maximum number permitted by Mexican authorities in any one day: provided that if the importer has his Mexican hunting permit date-stamped by appropriate Mexican wildlife authorities on the first day he hunts in Mexico, he may import the applicable Mexican possession limit corresponding to the days actually hunted during that particular trip.

R657-9-28. Use of Dogs.

(1) An individual may not use or permit a dog to harass, pursue, or take protected wildlife unless otherwise allowed for in the Wildlife Code, administrative rules issued under Wildlife Code, or a guidebook of the Wildlife Board.

(2) Dogs may be used to locate and retrieve turkey during open turkey hunting seasons.

(3) Dogs are generally allowed on state wildlife management and waterfowl management areas, subject to the following conditions.

(a) Dogs are not allowed on the following state wildlife management areas and waterfowl management areas between March 10 and August 31 annually or as posted by the Division:

(i) Annabella;
(ii) Bear River Trenton Property Parcel;
(iii) Bicknell Bottoms;
(iv) Blue Lake;
(v) Browns Park;
(vi) Bud Phelps;
(vii) Clear Lake;
(viii) Desert Lake;
(ix) Farmington Bay;
(x) Harold S. Crane;
(xi) Hatt's Ranch
(xii) Howard Slough;
(xiii) Huntington;
(xiv) James Walter Fitzgerald;
(xv) Kevin Conway;
(xvi) Locomotive Springs;
(xvii) Manti Meadows;
(xviii) Mills Meadows;
(xix) Montes Creek;
(xx) Nephi;
(xxi) Ogden Bay;
(xxii) Pahvant;
(xxiv) Public Shooting Grounds;
(xxv) Redmond Marsh;
(xxvi) Richfield;
(xxvii) Roosevelt;
(xxviii) Salt Creek;
(xxix) Scott M. Matheson Wetland Preserve;
(xxx) Steward Lake;
(xxxi) Timpie Springs;
(xxxii) Topaz Slough;
(xxxiii) Vernal; and
(xxxiv) Willard Bay.

(b) The Division may establish special restrictions for Division-managed properties, such as on-leash requirements and temporary or locational closures for dogs, and post them at specific Division properties and at Regional offices;

(c) Organized events or group gatherings of twenty-five (25) or more individuals that involve the use of dogs, such as dog training or trials, that occur on Division properties may require a special use permit as described in R657-28; and

(d) Dog training may be allowed in designated areas on Lee Kay Center and Willard Bay WMA by the Division without a special use permit.

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

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

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

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

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

(iii) 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.

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

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

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

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

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

(xii) 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 § 23-21-7 and Utah Administrative Code R657-28.

R657-9-31. Shooting Hours.

(1) A person may not hunt, pursue, or take wildlife, or discharge any firearm or archery tackle on state-owned lands adjacent to the Great Salt Lake, on division-controlled waterfowl management areas, or on federal refuges between official sunset and one-half hour before official sunrise.

(2) Legal shooting hours for taking or attempting to take waterfowl, Wilson's snipe, and coot are provided in the guidebook of the Wildlife Board for taking waterfowl, Wilson's snipe and coot.

R657-9-32. Falconry.

(1) Falconers must obtain a valid hunting or combination license, a federal migratory bird stamp and a falconry certificate of registration to hunt waterfowl.

(2) Areas open and bag and possession limits for falconry are specified in the guidebook of the Wildlife Board for taking waterfowl, Wilson's snipe and coot.

R657-9-33. Migratory Game Bird Harvest Information Program (HIP).

(1) A person must obtain an annual Migratory Game Bird Harvest Information Program (HIP) registration number to hunt migratory game birds.

(2)(a) A person must call the telephone number published in the guidebook of the Wildlife Board for taking waterfowl, Wilson's snipe and coot, or register online at the address published in the guidebook of the Wildlife Board for taking waterfowl, Wilson's snipe and coot to obtain their HIP registration number.

(b) A person must write their HIP registration number on their current year's hunting license.

(3) Any person obtaining a HIP registration number will be required to provide their:

(a) hunting license number;

(b) hunting license type;

(c) name;

(d) address;

(e) phone number;

(f) birth date; and

(g) information about the previous year's migratory bird hunts.

(4) Lifetime license holders will receive a sticker every three years from the division to write their HIP number on and place on their lifetime license card.

(5) Any person hunting migratory birds will be required, while in the field, to prove that they have registered and provided information for the HIP program.

R657-9-34. Waterfowl Blinds on Waterfowl Management Areas

(1) Waterfowl blinds on division waterfowl management areas may be constructed or used as provided in Subsection (a) through Subsection (e).

(a) Waterfowl blinds may not be left unattended overnight, except for blinds constructed entirely of non-woody, vegetative materials that naturally occur where the blind is located.

(b) Trees and shrubs on waterfowl management areas that are live or dead standing may not be cut or damaged except as expressly authorized in writing by the division.

(c) Excavating soil or rock on waterfowl management areas above or below water surface is strictly prohibited, except as expressly authorized in writing by the division.

(d) Rock and soil material may not be transported to waterfowl management areas for purposes of constructing a blind.

(e) Waterfowl blinds may not be constructed or used in any area or manner, which obstructs vehicular or pedestrian travel on dikes.

(2) The restrictions set forth in Subsection (1)(a) through Subsection (1)(c) do not apply to the following waterfowl management areas:

(a) Farmington Bay Waterfowl Management Area - West and North of Unit 1, Turpin Unit, and Doug Miller Unit,.

(b) Howard Slough Waterfowl Management Area - West and South of the exterior dike separating the waterfowl management area's fresh water impoundments from the Great Salt Lake.

(c) Ogden Bay Waterfowl Management Area - West of Unit 1, Unit 2, and Unit 3.

(d) Harold Crane Waterfowl Management Area - one half mile North and West of the exterior dike separating the waterfowl management area's fresh water impoundments from Willard Spur.

(3) Waterfowl blinds constructed or maintained on waterfowl management areas in violation of this section may be removed or destroyed by the division without notice.

(4) Any unoccupied, permanent waterfowl blind located on state land open to public access for hunting may be used by any person without priority to the person that constructed the blind. It being the intent of this rule to make such blinds available to any person on a first-come, first-serve basis.

(5) Waterfowl blinds or decoys cannot be left unattended overnight on state land open to public access for hunting in an effort to reserve the particular location where the blinds or decoys are placed.

KEY: wildlife, birds, migratory birds, waterfowl
Date of Enactment or Last Substantive Amendment: March 13, 2017
Notice of Continuation August 1, 2016
Authorizing, and Implemented or Interpreted Law: 23-14-19; 23-14-18; 50 CFR part 20

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
MICHAL D. FOWLKS
Interim Division Director

MEMORANDUM

Date: October 14, 2017

To: Wildlife Board and Regional Advisory Council Members

From: Martin B. Bushman, Assistant Attorney General

Subject: REPEAL OF R657-70 – TAKING UTAH PRAIRIE DOGS
AMENDMENT TO R657-19 – TAKING NONGAME MAMMALS

The U.S. District Court for Utah in *People for the Ethical Treatment of Property Owners v. U.S. Fish and Wildlife Service* issued a decision on November 5, 2014 vacating the federal government's authority under the Endangered Species Act (ESA) to regulate the take of Utah prairie dogs (UPD) on *non-federal* lands. With the resulting shift in management authority, the Division: 1) amended Rule R657-19, Taking Nongame Mammals to remove UPD take regulations mirroring ESA restrictions; and 2) promulgated a new rule (R657-70) entitled Taking Utah Prairie Dogs, to prescribed UPD take regulations under independent state authority. The rule changes became effective on May 9, 2015 and provided the state's regulatory framework for taking UPDs on nonfederal lands.

However, the U.S. District Court decision forming the basis for the rule changes was overturned by the Tenth Circuit Court of Appeals on March 29, 2017. That decision became effective on August 17, 2017, which restored federal authority over UPDs and subordinated state management authority to the ESA. On August 18, 2017, the Division repealed R657-70 through emergency rulemaking procedures since it was not consistent with the ESA. The Division also amended R657-19 by emergency rulemaking to restore the UPD take regulations that existed prior to the rule changes on May 9, 2015 and to include a couple non-substantive updates required to harmonize the restored language with current information and ESA regulations. Statutes governing emergency rulemaking require compliance with regular rulemaking procedures within 120 days of filing the emergency rule. The proposed rule changes are identical to the emergency changes and do not involve policy considerations -- but are legally required to reconcile the rules with the ESA and applicable federal regulations.

We are proposing to formally:

1) repeal R657-70, Taking Utah Prairie Dogs in its entirety; and

2) amend R657-19, Taking Nongame Mammals consistent with the language existing prior to May 9, 2015 with limited non-substantive updates.

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UTAH DNR WILDLIFE RESOURCES

R657. Natural Resources, Wildlife Resources.
R657-70. Taking Utah Prairie Dogs

R657-70-1. Purpose and Authority.

(1) Under authority of Sections 23-14-1, 23-14-3, 23-14-18 and 23-14-19, this rule provides the standards and requirements for taking Utah prairie dogs.

(2) A person capturing any live Utah prairie dog for a personal, scientific, educational, or commercial use must comply with rule R657-3, Collection, Importation, Transportation and Possession of Animals.

R657-70-2. Definitions.

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

(2) Additional terms used in this rule are defined as follows:

(a) “Agriculture land” means any mapped, non-federal property that is used or has been used in the previous five (5) years for production of a cultivated crop or irrigated pasture that is harvested or grazed.

(b) “Certificate of registration” means a document issued by the division authorizing a person or entity to take a Utah prairie dog.

(c) “Developed land” means any mapped, non-federal property that is:

(i) developed or improved for public use and where Utah prairie dogs threaten human health, safety or welfare, including parks, playgrounds, public facilities, sports fields, golf courses, school yards, churches, areas of cultural or religious significance, improved roads, transportation systems, etc.; or

(ii) within 50 feet of an occupied, residential or commercial structure, or greater distance where prairie dogs threaten human health, safety or welfare on developed curtilage, including lawns, landscaping, gardens, driveways, etc.

(d) “Developable land” means any mapped, non-federal property that does not have structures or improvements on the surface of the property, excluding utilities, on which construction of permanent structures or improvements is proposed.

(e) “Division” means the Utah Division of Wildlife Resources.

(f) “Federal land” means all lands in the State of Utah owned by the United States government, including Forest Service, Bureau of Land Management, Bureau of Reclamation, Department of Defense, National Park Service, Bureau of Indian Affairs, National Monument, and National Recreation Area lands.

(g) "Immediate family" means a landowner's or lessee's spouse, child, son-in-law, daughter-in-law, father, mother, father-in-law, mother-in-law, brother, sister, brother-in-law, sister-in-law, stepchild, and grandchild.

(h) “Landowner” means the person(s) or entity holding fee title to real property impacted by Utah prairie dogs.

(i) “Lessee” means the person(s) or entity leasing or renting under written contract real property impacted by Utah prairie dogs.

(j) “Mapped” means areas within the state identified and documented since 1972 by the division as currently or historically occupied by Utah prairie dogs, excluding mapped areas with a spring count of zero (0) animals in the current year and the preceding four (4) years.

(k) “Non-federal lands” means all lands in the State of Utah that are not owned by the United States government.

(l) “Productivity” means the segment of a population represented by young of the year; and is calculated by multiplying the spring count (animals observed) by 2 (animals underground), and multiplying that figure by 67% (percent females in the population), and multiplying that figure by 97% (percent females that breed), and multiplying that figure by 4 (average litter size).

(m) “Protected land” means federal and non-federal property that is set aside for the preservation of Utah prairie dogs and protected specifically or primarily for that purpose. Protective mechanisms can include conservation easements, fee title purchases, regulatory designations, etc.

(n) “Rangeland” means any mapped, non federal property that is used or has been used in the previous five (5) years for grazing livestock, and is neither cultivated nor irrigated.

(o) “Recovery unit” means one of the three geographic areas established by the Utah Prairie Dog Recovery Team for the protection and management of Utah prairie dogs – West Desert Recovery Unit, Paunsaugunt Recovery Unit, and Awapa Plateau Recovery Unit. Maps and boundaries of these units may be obtained from the division.

(p) “Unmapped” means any area of the state on non-federal land that is not classified as mapped by the division.

(q) “Utah prairie dog” or “prairie dog” means the genus and species *Cynomys parvidens*.

R657-70-3. Legal Status of Utah Prairie Dog.

(1) On federal land, the Utah prairie dog is listed as threatened under the Endangered Species Act of 1973 and subject to the federal laws, authorities and jurisdictions applicable to listed species.

(a) A person may not take a prairie dog on federal land, except as authorized by the:

(i) United States Fish and Wildlife Service and the federal regulations applicable to the species; and

(ii) division pursuant to this rule.

(2) On non-federal land, the Utah prairie dog is not subject to the Endangered Species Act of 1973 and is managed by State of Utah through the division.

(a) A person may not take a prairie dog on non-federal land, except as authorized by the Wildlife Code and this rule.

R657-70-4. Take of Utah Prairie Dogs on Federal Land.

(1) A person may not take a Utah prairie dog on federal land:

(a) except as authorized by the U.S. Fish and Wildlife Service and federal regulation; and

(b) without obtaining a certificate of registration from the division.

(2) Notwithstanding Subsection (1)(b), a certificate of registration is not required when a person receives an incidental take permit from the U.S. Fish and Wildlife Service under Section 7 of the Endangered Species Act.

R657-70-5. Take of Utah Prairie Dogs in Inhabited Structures on Non-federal Land.

(1)(a) Notwithstanding R657-70-13, any person, with the consent of the owner or lessee, may take a Utah prairie dog on non-federal land that is within the interior of a structure inhabited or occupied by people.

(b) For purposes of this section, an inhabited or occupied structure means a building where people live, work, or visit, such as a home, apartment, hotel, commercial or public office, public building, church, store, warehouse, business, work shop, restaurant, etc.

(2) A certificate of registration or prior notice to the division is not required to take a prairie dog under this section.

(3) A person that takes a prairie dog under this section is required to submit a monthly report to the division under R657-70-15.

R657-70-6. Take of Utah Prairie Dogs on Unmapped Land.

(1) A person may not take a Utah prairie dog on unmapped land, except as provided in this section and R657-70-8.

(2) A landowner or lessee of unmapped land may take a prairie dog on that land without a certificate of registration, provided:

(a) the division is notified prior to take and the property where take will occur is confirmed by the division to be unmapped land;

(b) take is performed exclusively by the individuals and under the conditions set forth in R657-70-13;

(c) take is restricted to the unmapped land owned by the landowner, or leased by the lessee; and

(d) the methods utilized to take prairie dogs are consistent with the limitations in R657-70-14;

(3) Prairie dogs may be taken pursuant to this section year-round and without numerical limitation.

(4) A person that takes a prairie dog under this section shall submit a monthly report to the division, as provided in R657-70-15.

R657-70-7. Take of Utah Prairie Dogs on Developed Land.

(1) A person may not take a Utah prairie dog on developed land, excepted as provided in this section and R657-70-8.

(2) A landowner or lessee of developed land may take a prairie dog on that land without a certificate of registration, provided:

(a) The division is notified prior to take and the property where take will occur is confirmed by the division to be developed land;

(b) Take is performed exclusively by the individuals and under the conditions set forth in R657-70-13;

(c) Take is restricted to the developed land owned by the landowner, or leased by the lessee; and

(d) The methods utilized to take prairie dogs are consistent with the limitations in R657-70-14;

(3) Prairie dogs may be taken pursuant to this section year-around and without numerical limitation.

(4) A person that takes a prairie dog under this section shall submit a monthly report to the division, as provided in R657-70-15.

R657-70-8. Local Law Enforcement Take of Utah Prairie Dogs on Non-federal Land.

(1)(a) Upon request of a county, the division may issue a certificate of registration to the sheriff and deputies of that county authorizing them to take Utah prairie dogs threatening public health, safety or welfare on non-federal land within the municipal boundaries of any city or town in the county.

(b) Upon request of a city or town, the division may issue a certificate of registration to the law enforcement authority of that city or town authorizing it to take Utah prairie dogs threatening public health, safety or welfare on non-federal land within the municipal boundaries of the city or town.

(2) A certificate of registration issued to a law enforcement authority under this section may permit lethal take or live trapping and relocation to a division approved release site.

(3) A county sheriff or the municipal law enforcement authority issued a certificate of registration under this section will report annually or upon request by the division, the number of prairie dogs lethally removed and the number captured and relocated, including the release site locations.

R657-70-9. Range-wide Take Limit for Developable Land, Agriculture Land, and Rangeland.

(1) Except as provided in Subsection (2), no more than 6,000 Utah prairie dogs will be authorized for range-wide take annually on developable land, agriculture land, and rangeland.

(2)(a) When the range-wide spring count of adult prairie dogs on non-federal/non-protected lands exceeds 6,000 individuals, the annual 6,000 range-wide take limit will be increased by ½ the number counted in excess of 6,000.

(b) When, and as long as, the three year average spring count of adult prairie dogs on protected land in a single recovery unit reaches 2,000 individuals, all certificate of registration requirements and numerical take limitations on non-federal/non-protected land in that recovery unit will be removed.

(i) All other restrictions on prairie dog take in the recovery unit will remain in place and enforceable.

(3) Prairie dog take on unmapped land, developed land, and inhabited structures does not count against the 6,000 animal annual limit.

R657-70-10. Take of Utah Prairie Dogs on Developable Land.

(1) A person may not take a Utah prairie dog on developable land without first obtaining a certificate of registration from the division.

(2)(a)(i) A person may obtain a certificate of registration to take prairie dogs on developable land when:

(A) a construction project is proposed for a parcel of developable land; and

(B) construction on the project is imminent.

(ii) The project proponent must notify the division prior to disturbing the surface of the ground or building a structure on developable land.

(b) Upon receiving notice of the proposed construction project, the division will survey the subject property for the presence of prairie dogs.

(i) If the property is not occupied by prairie dogs, the division will issue a written notification to the project proponent authorizing the project to proceed.

(ii) If prairie dogs are discovered on the property, the division will first attempt to trap and relocate the animals to the extent feasible and in coordination with the project proponent.

(A) Prairie dogs trapped and relocated from July 1 through October 1 are not counted against the range-wide prairie dog limit in R657-70-9.

(iii) If the project proponent declines to delay the project for trapping, or when trapping is determined complete, the division will issue a certificate of registration to the project proponent authorizing take of all prairie dogs present or remaining on the property.

(A) All take is counted against the range-wide prairie dog limit in R657-70-9.

(3) Notwithstanding the limitations in R657-70-13, take may be performed by any person authorized by the project proponent.

(4) Take is allowed only on the property proposed for the project and identified in the certificate of registration.

(5) Prairie dogs may be taken pursuant to this section year around.

R657-70-11. Take of Utah Prairie Dogs on Agriculture Land.

(1) A person may not take a Utah prairie dog on agriculture land without first obtaining a certificate of registration from the division, except as provided in R657-70-7.

(2) A landowner or lessee of agriculture land may apply to the division for a certificate of registration to take prairie dogs damaging their agriculture land.

(a) The application shall include the:

(i) applicant's full name, mailing address, and phone number;

(ii) applicant's status as an owner or lessee of the property;

(iii) landowner's signature, and consent when the applicant is a lessee;

(iv) name and identifying information for each individual designated by the applicant and eligible under R657-70-13 to take prairie dogs on the property; and

(v) township, range, section, 1/4 section, and parcel number of the agricultural land where the prairie dogs will be taken.

(b) An application for a certificate of registration must be submitted to the division's southern region office at 1470 North Airport Road, Suite 1, Cedar City, Utah 84721, or online when available.

(c) Upon receipt of an application, the division will determine the maximum number of Utah prairie dogs that may be taken on the property under a certificate of registration.

(i) The division will calculate the yearly maximum take using the following criteria:

(A) 50% of prairie dog productivity on the property may be authorized for take when the three year average spring count on protected land in the recovery unit is 999 or less;

(B) 100% of prairie dog productivity on the property may be authorized for take when the three year average spring count on protected land in the recovery unit is between 1,000 and 1,249;

(C) 100% of prairie dog productivity and 33% of spring count on the property may be authorized for take when three year average spring count on protected land in the recovery unit is between 1,250 and 1,499;

(D) 100% of prairie dog productivity and 66% of spring count on the property may be authorized for take when three year average spring count on protected land in the recovery unit is between 1,500 and 1,999; and

(E) Unlimited take is authorized without a certificate of registration when the three year average spring count on protected land in the recovery unit is 2,000 or greater.

(3)(a) After review of the application and determining the maximum take limit for the property, a certificate of registration may be issued.

(b) The certificate of registration will identify:

(i) the name of the property owner, lessee, or other person authorized to take prairie dogs on the property;

(ii) the maximum number of prairie dogs that may be taken on the property; and

(iii) a general description of the location and boundaries of the subject property.

(c) A certificate of registration shall be issued on an individual basis and shall be valid only for the person to whom it is issued.

(d) A certificate of registration is not transferrable and must be signed by the holder prior to use.

(e) If the application and permitting process is accomplished by U.S. Mail, the certificate of registration shall only become valid after a copy of the signed certificate of registration is received by the division's southern regional office.

(4) Prairie dogs allowed by the landowner or lessee to be trapped on the property and relocated by the division between July 1 and October 1 – before lethal take – will not count against the range-wide prairie dog limit in R657-70-9 or the property's maximum take limit identified on the certificate of registration unless the landowner or leesee is enrolled in the damage compensation program.

(5)(a) A landowner or lessee that obtains a certificate of registration to take prairie dogs on agriculture land and thereafter agrees with the division to allow trapping and relocation efforts on the property before lethally taking prairie dogs, may receive compensation for the damage caused by prairie dogs during the trapping period.

(i) Participation in the damage compensation program is voluntary on the part of the landowner or lessee and discretionary on the part of the division.

(ii) Only properties with a spring count of 50 or more prairie dogs are eligible for participation in the program.

(iii) Compensation will be based on the number of prairie dogs on the property and the associated damage estimate between May 1and September 30.

(b)(i) A landowner or lessee must apply to participate in the damage compensation program by submitting a written application to the division that includes:

(A) the applicant's full name, mailing address; and phone number;

(B) the township, range, section, 1/4 section and parcel number of the agricultural land where the prairie dogs will trapped;

(C) proof that the applicant is the fee title owner or lessee of the agricultural land where the prairie dogs will be trapped; and

(D) the landowner's signature, or the lessee's and landowner's signature when the applicant is the lessee.

(ii) An application to participate in the damage compensation program must be submitted:

(A) to the division's southern region office at 1470 North Airport Road, Suite 1, Cedar City, Utah 8472, or online when available; and

(B) by May 15 of the year for which compensation is requested.

(iii) Applications for damage compensation will be evaluated by the division and granted based on the:

(A) availability of compensation funding;

(B) number and density of prairie dogs that the division determines are present on the property;

(C) ease and efficiency by which prairie dogs can be trapped and relocated;

(D) availability of release sites;

(E) availability of division personnel and funding to trap and relocate; and

(F) degree of expected damage during the trapping period.

(iv) Nothing herein shall be construed as guaranteeing that an application to participate in the damage compensation program will be granted or that all persons desiring to participate in the program will have the opportunity to do so.

(c) Compensation for prairie dog damage will be based on the following criteria, regardless of the crop involved:

(i) the estimated number of prairie dogs on the property where trapping will occur;

(A) the division will estimated prairie dog numbers by counting visible prairie dogs on the property in the spring, doubling that number to account for adults below ground, and multiplying the result by 2.6 to account for juvenile production.

(ii) each adult prairie dog consuming 0.75 pounds of alfalfa a day and each juvenile 0.375 pounds a day;

(iii) adult prairie dogs causing damage five months per year and juveniles four months per year;

(iv) the market price of the alfalfa at the time the contract referenced in Subsection (d) is executed; and

(v) an additional 10% for damage to farming equipment and fences.

(d) The division will enter into a written contract with successful applicants possessing eligible property and a certificate of registration to take prairie dogs on their agriculture land that:

(i) suspends lethal removal efforts by the landowner or lessee until the division completes prairie dog trapping on the property; and

(ii) identifies the monetary compensation the landowner or lessee will receive from the division for seasonal prairie dog damage anticipated to occur.

(e) All prairie dogs trapped and relocated under a compensation agreement will count against the range-wide prairie dog limit in R657-70-9 and the property's maximum take limit identified on the certificate of registration.

(f) Once trapping is completed, the division will deduct the number of trapped prairie dogs from the certificate of registration's original take limit and notify the landowner or lessee:

(i) of the adjusted take limit; and

(ii) that removing prairie dogs from the property pursuant to the terms of the adjusted certificate of registration is permitted.

(6) The division may issue a certificate of registration authorizing a landowner or lessee to take prairie dogs dispersing from the property targeted for trapping under Subsections (4) or (5) to other areas of the property or adjacent properties that do not have a preexisting colony.

(7)(a) Only those people specifically identified in R657-70-13 and on a certificate of registration to take prairie dogs on agriculture land may do so.

(b) Take is restricted to the agriculture land owned by the landowner, or leased by the lessee.

(c) Prairie dogs may be taken on agriculture land only with firearms, archery equipment, and kill traps.

(d) Prairie dogs may be taken under this section from June 1 to December 31, and in number not to exceed that identified on the certificate of registration.

(8) A person that takes a prairie dog under this section shall submit a monthly report to the division, as provided in R657-70-15.

R657-70-12. Take of Utah Prairie Dogs on Rangeland.

(1) A person may not take a Utah prairie dog on rangeland without first obtaining a certificate of registration from the division.

(2) A landowner or lessee of rangeland may apply for and obtain a certificate of registration from the division to take prairie dogs damaging rangeland under the same procedures and conditions provided in R657-70-11 for taking prairie dogs on agriculture land, except monetary compensation is not available for rangeland damage.

R657-70-13. Individuals Authorized to Take Utah Prairie Dogs on Federal and Non-federal Lands.

(1) Except as provided in R657-70-8 and R657-70-10(3), only the following individuals may take a Utah prairie dog when take is authorized under the provisions of this chapter:

(a) landowner;

(b) lessee, when authorized by the landowner to take prairie dogs on the property;

(c) immediate family member of the landowner or lessee, when authorized by the landowner to take prairie dogs on the property;

(d) employee of the landowner or lessee that is on a regular payroll and not hired specifically to take prairie dogs, when authorized by the landowner to take prairie dogs on the property; and

(e) designee of the landowner or lessee that possesses a certificate of registration from the division, as provided in Subsection (2).

(2)(a) A person other than a landowner, lessee, or their immediate family member, or an employee on a regular payroll not hired specifically to take prairie dogs,

may apply for a certificate of registration to take prairie dogs as a designee of the landowner or lessee, provided the application includes:

(i) the applicant's:

(A) full name;

(B) complete mailing address;

(C) phone number;

(D) date of birth;

(E) weight and height;

(F) gender; and

(G) color of hair and eyes;

(ii) the township, range, section, 1/4 section and parcel number of the agricultural lands where the prairie dogs will be taken;

(iii) justification for utilization of the designee;

(iv) the landowner's signature or the lessee's and landowner's signature when the applicant is the lessee's designee; and

(v) verification that the designee will not pay or receive any form of compensation for taking prairie dogs on the landowner's or lessee's property.

(b) An application for a certificate of registration must be submitted to the division's southern region office at 1470 North Airport Road, Suite 1, Cedar City, Utah 84721 or online when available.

(c) A maximum of two designee certificates of registration may be issued per landowner and lessee each year.

(d) Each designee application shall be considered individually based upon the information, explanation and justification provided.

(e) An applicant must be at least 14 years of age at the time of application and must abide by the provisions for children being accompanied by adults while hunting with a weapon pursuant to Section 23-20-20.

(f)(i) After review of the application, a certificate of registration may be issued.

(ii) A certificate of registration shall be issued on an individual basis and shall be valid only for the person to whom it is issued.

(iii) A certificate of registration is not transferrable and must be signed by the holder prior to use.

(g) If the application and permitting process is accomplished by U.S. Mail, the certificate of registration shall only become valid after a copy of the signed certificate of registration is received by the division's southern regional office.

R657-70-14. Methods of Take.

(1)(a) A person authorized to take a Utah prairie dog under this chapter may lethally remove the animal using any means permitted by state, local, and federal law.

(b) Environmental Protection Agency regulations currently prohibit the use of toxicants and fumigants on Utah prairie dogs.

(2) Except as provided in R657-70-8 or as authorized by the division in a certificate of registration, a person may not:

(a) capture or attempt to capture a prairie dog alive;

(b) possess a live prairie dog; or

(c) release a prairie dog to the wild.

R657-70-15. Monthly Reports on Take of Utah Prairie Dogs.

(1) The following information must be reported every 30 days to the division's southern region office at 1470 North Airport Road, Suite 1, Cedar City, Utah 84720, or online when available:

(a) the name and signature of the landowner, lessee, or certificate of registration holder;

(b) the person's certificate of registration number (where applicable);

(c) the number of prairie dogs taken; and

(d) the location and method of disposal of each prairie dog taken during the 30-day period.

(2) Failure to report the information required in Subsection (1), within 30 days, may result in the denial of future opportunity to take prairie dogs.

R657-70-16. Take on Protected Land.

(1) Notwithstanding any other provision in this chapter authorizing take of prairie dogs, a person may not take a Utah prairie dog on protected land set aside by contractual agreement or law for the protection and conservation of Utah prairie dogs.

KEY: wildlife, game laws
Date of Enactment or Last Substantive Amendment: August 7, 2015
Notice of Continuation: New Rule
Authorizing, and Implemented or Interpreted Law: 23-14-1, 23-14-3, 23-14-18 and 23-14-19

R657. Natural Resources, Wildlife Resources.
R657-19. Taking Nongame Mammals.
R657-19-1. Purpose and Authority.

(1) Under authority of Sections 23-13-3, 23-14-18 and 23-14-19, this rule provides the standards and requirements for taking and possessing nongame mammals.

(2) A person capturing any live nongame mammal for a personal, scientific, educational, or commercial use must comply with R657-3 Collection, Importation, Transportation and Subsequent Possession of Zoological Animals.

R657-19-2. Definitions.

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

(2) In addition:

(a) "Immediate family" means the landowner's or lessee's spouse, children, son-in-law, daughter-in-law, father, mother, father-in-law, mother-in-law, brother, sister, brother-in-law, sister-in-law, stepchildren, and grandchildren.

(b) "Nongame mammal" means:

(i) any species of bats;

(ii) any species of mice, rats, or voles of the families Heteromyidae, Cricetidae, or Zapodidae;

(iii) opossum of the family Didelphidae;

(iv) pikas of the family Ochotonidae;

(v) porcupine of the family Erethizontidae;

(vi) shrews of the family Soricidae; and

(vii) squirrels, prairie dogs, and marmots of the family Sciuridae, excluding Utah prairie dogs, *Cynomys parvidens*.

R657-19-3. General Provisions.

(1) A person may not purchase or sell any nongame mammal or its parts.

(2)(a) The live capture of any nongame mammals is prohibited under this rule.

(b) The live capture of nongame mammals species may be allowed as authorized under Rule R657-3.

(3) Section 23-20-8 does not apply to the taking of nongame mammal species covered under this rule.

R657-19-4. Nongame Mammal Species - Certificate of Registration Required.

(1) A certificate of registration is required to take any of the following species of nongame mammals:

(a) bats of any species; and

(b) pika - Ochotona princeps.

(2) A certificate of registration is required to take any shrew - Soricidae, all species.

(3) A certificate of registration is required to take a Utah prairie dog, Cynomys parvidens, as provided in Sections R657[-~~70.~~][19-6, R657-19-7, R657-19-8 and R657-19-9.]

(4) A certificate of registration is required to take any of the following species of nongame mammals in Washington County:

(a) cactus mouse - Peromyscus eremicus;

(b) kangaroo rats - Dipodomys, all species;

(c) Southern grasshopper mouse - Onychomys torridus; and

(d) Virgin River montane vole - Microtus montanus rivularis, which occurs along stream-side riparian corridors of the Virgin River.

(5) A certificate of registration is required to take any of the following species of nongame mammals in San Juan and Grand counties:

(a) Abert squirrel - Sciurus aberti;

(b) Northern rock mouse - Peromyscus nasutus; and

(c) spotted ground squirrel - Spermophilus spilosoma.

(6) The division may deny a certificate of registration to any applicant, if:

(a) the applicant has violated any provision of:

(i) Title 23 of the Utah Code;

(ii) Title R657 of the Utah Administrative Code;

(iii) a certificate of registration;

(iv) an order of the Wildlife Board; or

(v) any other law that bears a reasonable relationship to the applicant's ability to safely and responsibly perform the activities that would be authorized by the certificate of registration;

(b) the applicant misrepresents or fails to disclose material information required in connection with the application;

(c) taking the nongame mammal as proposed in the application violates any federal, state or local law;

(d) the application is incomplete or fails to meet the issuance criteria set forth in this rule; or

(d) the division determines the activities sought in the application may significantly damage or are not in the interest of wildlife, wildlife habitat, serving the public, or public safety.

R657-19-5. Nongame Mammal Species - Certificate of Registration Not Required.

(1) All nongame mammal species not listed in Section R657-19-4 as requiring a certificate of registration, may be taken:

(a) without a certificate of registration;

(b) year-round, 24-hours-a-day; and

(c) without bag or possession limits.

(2) A certificate of registration is not required to take any of the following species of nongame mammals, however, the taking is subject to the provisions provided under Section R657-19-10:

(a) White-tailed prairie dog, Cynomys leucurus; and

(b) Gunnison prairie dog, Cynomys gunnisoni.

R657-19-6. [Utah Prairie Dog Provisions.]

[(1)(a) A person may not take a Utah Prairie dog, Cynomys parvidens, without first obtaining a certificate of registration from the division.]

[(b) A certificate of registration for taking Utah prairie dogs may be issued as provided in Subsection (i) or Subsection (ii), or Subsection (iii), if the taking will not further endanger the existence of the species:]

[(i) in cases where Utah Prairie dogs are causing damage to agricultural lands as provided in the rules of the U.S. Fish and Wildlife Service; or]

[(ii) as provided in a valid Incidental Take permit issued by the U.S. Fish and Wildlife Service under an approved Habitat Conservation Plan; or]

[(iii) as provided under a valid Incidental Take permit issued by the U.S. Fish and Wildlife Service allowing take of Utah prairie dogs on specified private lands as part of an approved conservation agreement enacted between the U.S. Fish and Wildlife Service and the owner of those private lands.]

[(c) A person may apply for a certificate of registration at the division's southern regional office, 1470 North Airport Road, Suite 1, Cedar City, Utah 84721.]

[(d) A landowner, lessee, or their immediate family member, or an employee on a regular payroll and not hired specifically to take Utah prairie dogs, may apply for a certificate of registration.]

[(e)(i) A person, other than those listed in Subsection (d), may apply for a certificate of registration to take Utah prairie dogs as a designee of the landowner or lessee provided the application includes:]

[(A) an explanation of the need for the certificate of registration to be issued;]

[(B) justification for utilization of the designee; and]

[(C) the landowner or lessee's signature.]

[(ii) A maximum of two designee certificates of registration may be issued per landowner or lessee.]

[(iii) Each designee application shall be considered individually based upon the explanation and justification provided.]

[(f) An application for a certificate of registration must include:]

[(i) full name;]

[(ii) complete mailing address;]

[(iii) phone number;]

[(iv) date of birth;]

[(v) weight and height;]

[(vi) gender;]

[(vii) color of hair and eyes;]

[(viii) social security number;]

[(ix) driver's license number, if issued;]

[(x) proof of hunter education certification if the applicant was born after December 31, 1965; and]

[(xi) the township, range, section and 1/4 section of the agricultural lands where the prairie dogs will be taken.]

[(g) An applicant must be at least 14 years of age at the time of application and must abide by the provisions for children being accompanied by adults while hunting with a weapon pursuant to Section 23-20-20.]

[(h) After review of the application, a certificate of registration may be issued.]

[(i) A maximum of four certificates of registration may be issued to any landowner or lessee, including those issued to the landowner or lessee's designees.]

[(j) A certificate of registration shall be issued on an individual basis and shall be valid only for the person to whom the certificate of registration is issued.]

[(k) A certificate of registration is not transferrable and must be signed by the holder prior to use.]

[(l) If the application and permitting process is accomplished by U.S. Mail, the certificate of registration shall only become valid after a copy of the signed certificate of registration is received by the division's southern regional office.]

[(2)(a) A person may take Utah prairie dogs with a firearm during daylight hours or by trapping as specified on the certificate of registration.]

[(b) A person may not use any chemical toxicant to take Utah prairie dogs.]

[(c) In addition to the requirements of this rule, any person taking Utah prairie dogs must comply with state laws, and local ordinances and laws.]

[(d) A person at least 14 years of age and under 16 years of age who takes Utah Prairie dogs must be accompanied by an adult with a valid certificate of registration to take Utah Prairie dogs on the same property.]

[R657-19-7. Areas Open to Taking Utah Prairie Dogs -- Dates Open --Limits on Number of Utah Prairie Dogs Taken.]

[(1) A person who obtains a valid certificate of registration may take Utah prairie dogs only on private lands within the following counties:]

[(a) Beaver;]

[(b) Garfield;]

[(c) Iron;]

[(d) Kane;]

[(e) Millard;]

[(f) Piute;]

[(g) Sanpete;]

[(h) Sevier;]

[(i) Washington; and]

[(j) Wayne.]

[(2) Taking of a Utah prairie dog on any land or by any method, other than as provided in the valid certificate of registration, including any public land, is a violation of state and federal law.]

[(3) Any person, who is specifically named on a valid certificate of registration, may remove Utah prairie dogs, as provided in the certificate of registration.]

[(4) The taking of any Utah prairie dog outside the areas provided in this section is prohibited, except by division employees while acting in the performance of their assigned duties.]

[(5) The taking of Utah prairie dogs is limited to the dates designated on the certificate of registration. All dates are confined to June 15 through December 31, except as provided in Subsection R657-19-6(1)(b)(iii).]

[(6)(a) A person may take only the total number of Utah prairie dogs designated in the certificate of registration, except as provided in Subsection R657-19-6(1)(b)(iii).]

[(b) The total annual range-wide take of Utah prairie dogs and the total annual take of Utah prairie dogs on agricultural lands is governed by federal law.]

[(c) If the division determines that taking Utah prairie dogs has an adverse effect on conservation of the species, taking shall be further restricted or prohibited.]

[R657-19-8. Monthly Reports of Take of Utah Prairie Dogs.]

[(1) The following information must be reported to the division's southern regional office, 1470 North Airport Road, Suite 1, Cedar City, Utah 84721, every 30 days:]

[(a) the name and signature of the certificate of registration holder;]

[(b) the person's certificate of registration number;]

[(c) the number of Utah prairie dogs taken; and]

[(d) the location, method of take, and method of disposal of each Utah prairie dog taken during the 30-day period.]

[(2) Failure to report the information required in Subsection (1), within 30 days, may result in the denial of future applications for a certificate of registration to take Utah prairie dogs.]

[R657-19-9. Unlawful Possession of Utah Prairie Dogs.]

[A person may not possess a Utah prairie dog or its parts, without first obtaining a valid certificate of registration and a federal permit.]

[R657-19-10. White-tailed and Gunnison Prairie Dogs.]

(1)(a) A license or certificate of registration is not required to take either white-tailed or Gunnison prairie dogs.

(b) There are no bag limits for white-tailed or Gunnison prairie dogs for which there is an open season.

(2)(a) White-tailed prairie dogs, Cynomys leucurus, may be taken in the following counties from January 1 through March 31, and June 16 through December 31:

(i) Carbon County;

(ii) Daggett County;

(iii) Duchesne County;

(iv) Emery County;

(v) Morgan;

(vi) Rich;

(vii) Summit County;

(viii) Uintah County, except in the closed area as provided in Subsection (2)(b)(i);

(ix) Weber; and

(x) all areas west and north of the Colorado River in Grand and San Juan counties.

(b) White-tailed prairie dogs, Cynomys leucurus, may not be taken in the following closed area in order to protect the reintroduced population of black-footed ferrets, Mustela nigripes:

(i) Boundary begins at the Utah/Colorado state line and Uintah County Road 403, also known as Stanton Road, northeast of Bonanza; southwest along this road to SR 45 at Bonanza; north along this highway to Uintah County Road 328, also known as

Old Bonanza Highway; north along this road to Raven Ridge, just south of US 40; southeast along Raven Ridge to the Utah/Colorado state line; south along this state line to point of beginning.

(3) The taking of White-tailed prairie dogs, Cynomys leucurus, is prohibited from April 1 through June 15, except as provided in Subsection (5).

(4)(a) The taking of Gunnison prairie dogs, Cynomys gunnisoni, is prohibited in all areas south and east of the Colorado River, and north of the Navajo Nation in Grand and San Juan counties from April 1 through June 15.

(b) Gunnison prairie dogs may be taken in the area provided in Subsection (4)(a) from June 16 through March 31.

(5) Gunnison prairie dogs and White-tailed prairie dogs causing agricultural damage or creating a nuisance on private land may be taken at any time, including during the closed season from April 1 through June 15.

R657-19[~~-7.~~][11.] Violation.

(1) Any violation of this rule is a Class C misdemeanor as provided in Section 23-13-11(2).

(2) In addition to this rule any animal designated as a threatened or endangered species is governed by the Endangered Species Act and the unlawful taking of these species may also be a violation of federal law and rules promulgated thereunder.

(3) Pursuant to Section 23-19-9, the division may suspend a certificate of registration issued under this rule.

KEY: wildlife, game laws
Date of Enactment or Last Substantive Amendment: May 9, 2015
Notice of Continuation: August 5, 2013
Authorizing, and Implemented or Interpreted Law: 23-13-3; 23-14-18; 23-14-19

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
MICHAL D. FOWLKS
Division Director

MEMORANDUM

Date: October 17, 2017

To: Wildlife Board and Regional Advisory Council Members

From: Covy Jones, Big Game Coordinator

SUBJECT: 2018 BBOIAL Season Dates, Boundary Changes, Proposed Rule Changes to R657-5, and Proposed Rule R657-71 -Removing Wild Deer from Domesticated Elk Facilities

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:

Statewide Changes

1. We recommend adding early season any weapon deer hunts. These hunts are designed to reduce crowding and address buck to doe ratios that are perennially over objective. Early season any weapon hunts are proposed on the following units: 1) Kamas, 2) Chalk Creek/East Canyon/Morgan-S Rich 3) Nine Mile 4) Fillmore, 5) Fishlake, 6) Panguitch Lake,7) Pine Valley, 8) Zion
2. We recommend adding late season limited entry muzzleloader hunts on all units that are meeting minimum buck to doe ratio objectives. Currently ALL general season units would qualify.
3. We recommend adding multi-season elk permits on spike and any bull units. Permits would be deducted from existing spike and any bull quotas.

Southern Region Changes

1. We recommend adding a cactus buck hunt on the Paunsaugunt unit.
2. We recommend boundary changes on Mt Dutton/Paunsaugunt and Plateau, Parker Mtn pronghorn units.
3. We recommend Fillmore, Oak Creek be renamed Fillmore, Oak Creek South for general season any bull and buck pronghorn.

Southeast Region Changes

1. We recommend adding La Sal, La Sal Mtns mountain goat hunt.
2. We recommend boundary change on Nine Mile, Jack Creek bighorn sheep unit to include the bighorn population on the south Book Cliffs.

Northern Region Changes

1. We recommend reinstating the Box Elder, Pilot Mtn bighorn sheep hunt.
2. We recommend a boundary change to Cache extended archery area.

Central Region Changes

1. We recommend splitting the Wasatch Mtns, Box Elder Peak/Lone Peak/Timp mountain goat units and creating 3 individual units Wasatch Mtns, Box Elder Peak; Wasatch Mtns, Lone Peak; and Wasatch Mtns, Timpanogos to more effectively direct pressure on these units.
2. We recommend combining two Rocky Mountain bighorn sheep units - Central Mtns, Nebo/Wasatch Mtns, West and Wasatch Mtns, Avintaquin. (Change would remove language concerning alternating closures between the Sportsmen permit holder and the Statewide Conservation permit holder on those units from R657-41-2)
3. We recommend a boundary change to Box Elder, Puddle Valley pronghorn unit.

Northeast Region Changes

1. We recommend altering the season dates on the Uintah Basin extended archery elk to align with Wasatch extended archery elk season August 18 – December 15.

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:

See attached rule redline for detailed changes.

1. We recommend the following changes to archery tackle requirements: 1) lower minimum draw weight 2) remove restriction on minimum arrow weight.
2. We recommend the following changes to crossbow requirements: 1) remove requirement for minimum crossbow length 2) remove requirement for minimum draw length.
3. We recommend adding a section to define ewe bighorn hunts. We recommend this be a limited entry hunt with a 5-year waiting period similar to cow moose. Desert and Rocky Mountain bighorn points will be allocated independently.
4. We recommend a definition for a cactus buck and outline requirements for cactus buck hunters.
5. We recommend establishing language for multi-season any bull and spike elk hunts.
6. We recommend clarifying language in the spotlighting section.
7. We recommend adding a section on hunter orange to clarify and simplify regulations where possible.
8. We recommend adding language to allow for archery hunts on once in a lifetime species.

Proposed Rule R657-71 - Removing Wild Deer From Domesticated Elk Facilities

See attached rule.

1. We recommend authorizing operators of domesticated elk facilities, managed by the Department of Agriculture, to remove wild deer from within those facilities.
2. We recommend that the operator, immediate family, or employee remove wild deer.
3. We recommend that the operator, for removal of these deer, can assess no fee.

4. We recommend that all parts and pieces of the deer removed including antlers, be turned over to the Division in a condition that they can be tested for disease and donated for consumption.
5. We recommend removal efforts occur between August 1 and December 31.
6. We recommend that the facility be inspected and the fence is secure prior to any removal effort.
7. We recommend that the operator communicate with the Department of Agriculture about any wild deer removal efforts.

ONCE IN A LIFETIME SPECIES

Bull Moose		2018	2018	2018
Hunt #	**Hunt Name**	**Season Dates**	**Nonres Permits**	**Notes**
MB6000	Cache	Sept. 15–Oct. 18	y	
MB6001	Chalk Creek †	Sept. 15–Oct. 18	n	
MB6002	East Canyon †	Sept. 15–Oct. 18	n	
MB6003	East Canyon, Morgan-Summit †	Sept. 15–Oct. 18	n	
MB6004	Kamas	Sept. 15–Oct. 18	n	
MB6005	Morgan-South Rich †	Sept. 15–Oct. 18	n	
MB6006	North Slope, Summit	Sept. 15–Oct. 18	y	
MB6007	North Slope, Three Corners/West Daggett	Sept. 15–Oct. 18	n	
MB6008	Ogden †	Sept. 15–Oct. 18	n	
MB6009	South Slope, Diamond Mtn/Vernal	Sept. 15–Oct. 18	n	
MB6010	South Slope, Yellowstone	Sept. 15–Oct. 18	n	
MB6011	Wasatch Mtns/Central Mtns	Sept. 15–Oct. 18	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				
Any Legal Weapon Hunts		**2018**	**2018**	**2018**
Hunt #	**Hunt Name**	**Season Dates**	**Nonres Permits**	**Notes**
BI6500	Antelope Island	Dec. 3–Dec. 14	n	
BI6501	Book Cliffs (hunter's choice)	Oct. 13–Nov. 30	y	
BI6507	Book Cliffs, Wild Horse Bench/Nine Mile (hunter's choice)	Aug. 1 2018–Jan. 31 2019	y	
BI6508	Book Cliffs (cow only)	Nov. 10–Nov. 30	y	
BI6503	Henry Mtns (hunter's choice)	Nov. 3–Nov. 15	y	
BI6504	Henry Mtns (hunter's choice)	Nov. 17–Nov. 29	y	
BI6505	Henry Mtns (cow only)	Dec. 1–Dec. 14	y	
BI6506	Henry Mtns (cow only)	Dec. 15–Dec. 31	y	
Archery Hunts		**2018**	**2018**	**2018**
Hunt #	**Hunt Name**	**Season Dates**	**Nonres Permits**	**Notes**
BI6509	Henry Mtns (hunter's choice)	Oct. 5–Oct. 19	y	Archery only

Desert Bighorn Sheep		2018	2018	2018
Hunt #	**Hunt Name**	**Season Dates**	**Nonres Permits**	**Notes**
DS6600	Henry Mtns	Sept. 15–Nov.10	n	
DS6601	Kaiparowits, East*	Sept. 15–Nov.10	y	
DS6602	Kaiparowits, Escalante	Sept. 15–Nov.10	n	
DS6603	Kaiparowits, West	Sept. 15–Nov.10	y	
DS6604	La Sal, Potash/South Cisco	Sept. 15–Nov.10	n	
DS6605	Pine Valley	Oct. 27–Dec. 30	n	
DS6606	San Juan, Lockhart	Sept. 15–Nov.10	n	
DS6607	San Juan, South	Sept. 15–Nov.10	n	
DS6608	San Rafael, Dirty Devil	Sept. 15–Nov.10	n	
DS6609	San Rafael, North	Sept. 15–Nov.10	n	
DS6610	San Rafael, South †	Sept. 15–Nov.10	y	
DS6611	Zion^	Sept. 15–Nov.10	y	
DS6612	Zion	Oct. 13–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		2018	2018	2018
Hunt #	Hunt Name	Season Dates	Nonres Permits	Notes
RS6700	Antelope Island	Nov. 14–Nov. 21	n	
RS6701	Book Cliffs, South	Nov. 1–Nov. 30	y	
RS6703	Box Elder, Newfoundland Mtn	Oct. 27–Nov. 16	n	
RS6704	Box Elder, Newfoundland Mtn	Nov. 17–Dec. 9	y	
RS6702	Box Elder, Pilot Mtn	Sept.1 - Oct. 30	n	New Hunt
RS6705	Central Mtns, Nebo/Wasatch Mtns, West*			Discontinued Hunt
RS6719	Central Mtns, Nebo/Wasatch Mtns	Nov. 1–Nov. 30	n	New Hunt
RS6712	Nine Mile, Gray Canyon	Nov. 1–Nov. 30	y	
RS6713	Nine Mile, Jack Creek	Nov. 1–Nov. 30	n	Difficult Access, boundary change
RS6714	North Slope, Bare Top/West Daggett	Nov. 1–Nov. 30	n	
RS6711	Wasatch Mtns, Avintaquin*			Discontinued Hunt

Mountain Goat				
Any Legal Weapon Hunts		2018	2018	2018
Hunt #	Hunt Name	Season Dates	Nonres Permits	Notes
GO6800	Beaver	Sept. 8–Sept. 23	y	
GO6801	Beaver	Sept. 24–Nov. 14	n	
GO6803	Central Mtns, Nebo	Sept. 10–Nov. 30	n	
GO6804	Chalk Creek/Kamas, Uintas	Sept. 15–Oct. 31	y	
GO6817	La Sal, La Sal Mtns	Sept 10–Nov. 30	n	
GO6814	Mt Dutton	Sept 10–Nov. 30	n	
GO6805	North Slope/South Slope, High Uintas Central	Sept. 10–Oct. 31	y	
GO6806	North Slope/South Slope, High Uintas East	Sept. 10–Oct. 31	n	
GO6807	North Slope/South Slope, High Uintas Leidy Peak	Sept. 10–Oct. 31	n	
GO6808	North Slope/South Slope, High Uintas West	Sept. 10–Oct. 31	y	
GO6809	Ogden, Willard Peak	Sept. 10–Sept. 23	y	
GO6810	Ogden, Willard Peak	Sept. 24–Nov. 14	y	
GO6811	Ogden, Willard Peak (female goat only)	Oct. 8–Nov. 15	y	
GO6812	Wasatch Mtns, Box Elder Peak/Lone Peak/Timpanogos*			Discontinued hunt. Split into3
GO6818	Wasatch Mtns, Box Elder Peak	Sept. 10–Nov. 30	n	New Hunt
GO6819	Wasatch Mtns, Lone Peak	Sept. 10–Nov. 30	n	New Hunt
GO6813	Wasatch Mtns, Provo Peak	Sept. 10–Nov. 30	n	
GO6820	Wasatch Mtns, Timpanogos	Sept. 10–Nov. 30	n	New Hunt
Archery Hunts		2018	2018	2018
Hunt #	Hunt Name	Season Dates	Nonres Permits	Notes
GO6815	North Slope/South Slope, High Uintas Central	Aug. 18–Sept. 9	n	Archery only

(y) At least one nonresident permit in 2018

(n) No nonresident permit in 2018

NOTE: Permit numbers will be determined in May 2018

The 2018 DWR General Season Elk Dates Recommendation

Archery Spike	**Aug 18-Sept 7**	**Needs to end one week earlie**
Archery Any Bull	**Aug 18-Sept 14**	
Muzzleloader	**Oct. 31–Nov. 8**	
Rifle	**Oct. 6–Oct. 18**	
Extended Archery Elk		
Uintah Basin	**Aug. 18–Dec. 15**	
Wasatch Front	**Aug. 18–Dec. 15**	

***NOTE: name change to general season elk unit: Fillmore, Oak Creek wil change name to Fillmore, Oak Creek South**

Limited Entry Bull Elk

Archery Hunts

		2018	2018	2018
Hunt #	**Hunt Name**	**Season Dates**	**Nonres Permits**	**Notes**
EB3000	Beaver, East	Aug. 18–Sept. 14	y	
EB3001	Book Cliffs, Bitter Creek/South	Aug. 18–Sept. 14	y	
EB3002	Book Cliffs, Little Creek Roadless	Aug. 18–Sept. 14	y	
EB3003	Cache, Meadowville †	Aug. 18–Sept. 14	y	
EB3004	Cache, North	Aug. 18–Sept. 14	y	
EB3005	Cache, South	Aug. 18–Sept. 14	y	
EB3006	Central Mtns, Manti	Aug. 18–Sept. 14	y	
EB3007	Central Mtns, Nebo	Aug. 18–Sept. 14	y	
EB3008	Fillmore, Pahvant	Aug. 18–Sept. 14	y	
EB3009	La Sal, La Sal Mtns	Aug. 18–Sept. 14	y	
EB3010	Monroe	Aug. 18–Sept. 14	y	
EB3011	Mt Dutton	Aug. 18–Sept. 14	y	
EB3012	Nine Mile, Anthro	Aug. 18–Sept. 14	y	
EB3013	North Slope, Three Corners	Aug. 18–Sept. 14	y	
EB3014	Oquirrh-Stansbury	Aug. 18–Sept. 14	y	
EB3015	Panguitch Lake	Aug. 18–Sept. 14	y	
EB3016	Paunsaugunt	Aug. 18–Sept. 14	y	
EB3017	Plateau, Boulder/Kaiparowits	Aug. 18–Sept. 14	y	
EB3018	Plateau, Fishlake/Thousand Lakes	Aug. 18–Sept. 14	y	
EB3019	San Juan (bull elk)	Aug. 18–Sept. 14	y	
EB3020	South Slope, Diamond Mtn	Aug. 18–Sept. 14	y	
EB3021	Southwest Desert	Aug. 18–Sept. 14	y	
EB3022	Wasatch Mtns	Aug. 18–Sept. 14	y	
EB3023	West Desert, Deep Creek	Aug. 18–Sept. 14	y	

Any legal weapon hunts (early rifle)

		2018	2018	2018
Hunt #	**Hunt Name**	**Season Dates**	**Nonres Permits**	**Notes**
EB3024	Beaver, East	Sept. 15–Sept. 23	y	
EB3026	Book Cliffs, Bitter Creek/South	Sept. 15–Sept. 23	y	
EB3028	Book Cliffs, Little Creek Roadless	Sept. 15–Sept. 23	y	
EB3029	Box Elder, Grouse Creek	Sept. 15–Sept. 23	y	
EB3031	Box Elder, Pilot Mtn	Sept. 15–Sept. 23	y	
EB3032	Cache, Meadowville †	Sept. 15–Sept. 23	y	
EB3034	Cache, North	Sept. 15–Sept. 23	y	
EB3036	Cache, South	Sept. 15–Sept. 23	y	
EB3038	Central Mtns, Manti	Sept. 15–Sept. 23	y	
EB3040	Central Mtns, Nebo	Sept. 15–Sept. 23	y	
EB3042	Fillmore, Pahvant	Sept. 15–Sept. 23	y	
EB3045	La Sal, La Sal Mtns	Sept. 15–Sept. 23	y	
EB3047	Monroe	Sept. 15–Sept. 23	y	
EB3049	Mt Dutton	Sept. 15–Sept. 23	y	
EB3051	Nine Mile, Anthro	Sept. 15–Sept. 23	y	

EB3054	Oquirrh-Stansbury	Sept. 15–Sept. 23	y	
EB3056	Panguitch Lake	Sept. 15–Sept. 23	y	
EB3058	Paunsaugunt	Sept. 15–Sept. 23	y	
EB3061	Plateau, Boulder/Kaiparowits	Sept. 15–Sept. 23	y	
EB3063	Plateau, Fishlake/Thousand Lakes	Sept. 15–Sept. 23	y	
EB3066	San Juan (bull elk)	Sept. 15–Sept. 23	y	
EB3068	South Slope, Diamond Mtn	Sept. 15–Sept. 23	y	
EB3070	Southwest Desert	Sept. 15–Sept. 23	y	
EB3072	Wasatch Mtns	Sept. 15–Sept. 23	y	
EB3074	West Desert, Deep Creek	Sept. 15–Sept. 23	y	

Any legal weapon hunts (mid rifle)

		2018	2018	2018
Hunt #	**Hunt Name**	**Season Dates**	**Nonres Permits**	**Notes**
EB3030	Box Elder, Grouse Creek	Oct. 6–Oct. 28	y	
EB3126	Central Mtns, Manti	Oct. 6–Oct. 18	y	
EB3053	North Slope, Three Corners	Oct. 6–Oct. 18	y	Tri-State Agreement / Date Change
EB3059	Paunsaugunt	Oct. 6–Oct. 18	y	
EB3064	Plateau, Fishlake/Thousand Lakes	Oct. 6–Oct. 18	y	
EB3069	South Slope, Diamond Mtn	Oct. 6–Oct. 18	y	
EB3127	Wasatch Mtns	Oct. 6–Oct. 18	y	
EB3075	West Desert, Deep Creek	Oct. 6–Oct. 18	n	

Any legal weapon hunts (late rifle)

		2018	2018	2018
Hunt #	**Hunt Name**	**Season Dates**	**Nonres Permits**	**Notes**
EB3025	Beaver, East	Nov. 10–Nov. 18	y	
EB3027	Book Cliffs, Bitter Creek/South	Nov. 10–Nov. 18	y	
EB3033	Cache, Meadowville †	Nov. 10–Nov. 18	y	
EB3035	Cache, North	Nov. 10–Nov. 18	y	
EB3037	Cache, South	Nov. 10–Nov. 18	y	
EB3039	Central Mtns, Manti	Nov. 10–Nov. 18	y	
EB3041	Central Mtns, Nebo	Nov. 10–Nov. 18	y	
EB3043	Fillmore, Pahvant	Nov. 10–Nov. 18	y	
EB3044	La Sal, Dolores Triangle	Dec. 8, 2018–Jan. 31, 2019	y	
EB3046	La Sal, La Sal Mtns	Nov. 10–Nov. 18	y	
EB3048	Monroe	Nov. 10–Nov. 18	y	
EB3050	Mt Dutton	Nov. 10–Nov. 18	y	
EB3052	Nine Mile, Anthro	Nov. 10–Nov. 18	y	
EB3055	Oquirrh-Stansbury	Nov. 10–Nov. 18	y	
EB3057	Panguitch Lake	Nov. 10–Nov. 18	y	
EB3060	Paunsaugunt	Nov. 10–Nov. 18	y	
EB3062	Plateau, Boulder/Kaiparowits	Nov. 10–Nov. 18	y	
EB3065	Plateau, Fishlake/Thousand Lakes	Nov. 10–Nov. 18	y	
EB3067	San Juan (bull elk)	Nov. 10–Nov. 18	y	
EB3071	Southwest Desert	Nov. 10–Nov. 18	y	
EB3073	Wasatch Mtns	Nov. 10–Nov. 18	y	
EB3076	West Desert, Deep Creek	Nov. 10–Nov. 18	n	

Muzzleloader Hunts

		2018	2018	2018
Hunt #	**Hunt Name**	**Season Dates**	**Nonres Permits**	**Notes**
EB3077	Beaver, East	Sept. 24–Oct. 5	n	
EB3078	Book Cliffs, Bitter Creek/South	Sept. 24–Oct. 5	y	
EB3079	Book Cliffs, Little Creek Roadless	Sept. 24–Oct. 5	y	
EB3080	Box Elder, Grouse Creek	Sept. 24–Oct. 5	y	
EB3081	Cache, Meadowville †	Sept. 24–Oct. 5	y	
EB3082	Cache, North	Sept. 24–Oct. 5	n	

EB3083	Cache, South	Sept. 24–Oct. 5	y	
EB3084	Central Mtns, Manti	Sept. 24–Oct. 5	y	
EB3085	Central Mtns, Nebo	Sept. 24–Oct. 5	y	
EB3086	Fillmore, Pahvant	Sept. 24–Oct. 5	y	
EB3087	La Sal, La Sal Mtns	Sept. 24–Oct. 5	y	
EB3088	Monroe	Sept. 24–Oct. 5	y	
EB3089	Mt Dutton	Sept. 24–Oct. 5	y	
EB3090	Nine Mile, Anthro	Sept. 24–Oct. 5	n	
EB3091	North Slope, Three Corners	Oct. 31–Nov. 8	y	Tri-State Agreement
EB3092	Oquirrh-Stansbury	Sept. 24–Oct. 5	n	
EB3093	Panguitch Lake	Sept. 24–Oct. 5	y	
EB3094	Paunsaugunt	Sept. 24–Oct. 5	y	
EB3095	Plateau, Boulder/Kaiparowits	Sept. 24–Oct. 5	y	
EB3096	Plateau, Fishlake/Thousand Lakes	Sept. 24–Oct. 5	y	
EB3097	San Juan (bull elk)	Sept. 24–Oct. 5	y	
EB3098	South Slope, Diamond Mtn	Sept. 24–Oct. 5	y	
EB3099	Southwest Desert	Sept. 24–Oct. 5	y	
EB3100	Wasatch Mtns	Sept. 24–Oct. 5	y	
EB3101	West Desert, Deep Creek	Sept. 24–Oct. 5	n	

Multi-Season

		2018	2018	2018
Hunt #	**Hunt Name**	**Season Dates**	**Nonres Permits**	**Notes**
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

		2018	2018	2018
Hunt #	**Hunt Name**	**Season Dates**	**Nonres Permits**	**Notes**
EB1004	Youth General Any Bull Elk	Sept. 15–Sept. 23	y	

(y) At least one nonresident permit in 2018

(n) No nonresident permit in 2018

NOTE: Permit numbers will be determined in May 2018

The 2018 DWR General Season Deer Dates Recommendation
Extended Archery Deer

Cache, Laketown; Ogden; Uintah Basin; Wasatch Front; West Cache; **Sept. 15–Nov. 30**

General Season Buck Deer

General Season Archery Hunts

Hunt #	Hunt Name	Unit #	2018 Season Dates	2018 Nonres Permits	2018 Notes
DB1500	Beaver	22	Aug. 18–Sept. 14	y	
DB1501	Box Elder	1	Aug. 18–Sept. 14	y	
DB1502	Cache	2	Aug. 18–Sept. 14	y	
DB1503	Central Mtns, Manti/San Rafael	12/16B	Aug. 18–Sept. 14	y	
DB1504	Central Mtns, Nebo	16A	Aug. 18–Sept. 14	y	
DB1505	Chalk Creek/East Canyon/Morgan-South Rich	4/5/6	Aug. 18–Sept. 14	y	
DB1506	Fillmore	21A/21B	Aug. 18–Sept. 14	y	
DB1508	Kamas	7	Aug. 18–Sept. 14	y	
DB1509	La Sal, La Sal Mtns	13A	Aug. 18–Sept. 14	y	
DB1510	Monroe	23	Aug. 18–Sept. 14	y	
DB1511	Mt Dutton	24	Aug. 18–Sept. 14	y	
DB1512	Nine Mile	11	Aug. 18–Sept. 14	y	
DB1513	North Slope	8	Aug. 18–Sept. 14	y	
DB1514	Ogden	3	Aug. 18–Sept. 14	y	
DB1515	Oquirrh-Stansbury	18	Aug. 18–Sept. 14	y	
DB1516	Panguitch Lake	28	Aug. 18–Sept. 14	y	
DB1517	Pine Valley	30	Aug. 18–Sept. 14	y	
DB1518	Plateau, Boulder/Kaiparowits	25C/26	Aug. 18–Sept. 14	y	
DB1519	Plateau, Fishlake	25A	Aug. 18–Sept. 14	y	
DB1520	Plateau, Thousand Lakes	25B	Aug. 18–Sept. 14	y	
DB1521	San Juan, Abajo Mtns	14A	Aug. 18–Sept. 14	y	
DB1522	South Slope, Bonanza/Vernal	9B/9D	Aug. 18–Sept. 14	y	
DB1523	South Slope, Yellowstone	9A	Aug. 18–Sept. 14	y	Large Areas of Tribal Land
DB1524	Southwest Desert	20	Aug. 18–Sept. 14	y	
DB1525	Wasatch Mtns, East	17B/17C	Aug. 18–Sept. 14	y	
DB1526	Wasatch Mtns, West	17A	Aug. 18–Sept. 14	y	
DB1527	West Desert, Tintic	19C	Aug. 18–Sept. 14	y	
DB1528	West Desert, West	19A	Aug. 18–Sept. 14	y	
DB1529	Zion	29	Aug. 18–Sept. 14	y	

General Season Any Legal Weapon Hunts (early)

Hunt #	Hunt Name	Unit #	2018 Season Dates	2018 Nonres Permits	2018 Notes
DB1590	Chalk Creek/East Canyon/Morgan-South Rich	4/5/6	Oct. 10–Oct. 14	y	New Hunt
DB1592	Fillmore	21A/21B	Oct. 10–Oct. 14	y	New Hunt
DB1591	Kamas	7	Oct. 10–Oct. 14	y	New Hunt
DB1597	Nine Mile	11	Oct. 10–Oct. 14	y	New Hunt
DB1595	Panguitch Lake	28	Oct. 10–Oct. 14	y	New Hunt
DB1594	Pine Valley	30	Oct. 10–Oct. 14	y	New Hunt
DB1593	Plateau, Fishlake	25A	Oct. 10–Oct. 14	y	New Hunt
DB1596	Zion	29	Oct. 10–Oct. 14	y	New Hunt

General Season Any Legal Weapon Hunts

Hunt #	Hunt Name	Unit #	2018 Season Dates	2018 Nonres Permits	2018 Notes
DB1530	Beaver	22	Oct. 20–Oct. 28	y	
DB1531	Box Elder	1	Oct. 20–Oct. 28	y	
DB1532	Cache	2	Oct. 20–Oct. 28	y	
DB1533	Central Mtns, Manti/San Rafael	12/16B	Oct. 20–Oct. 28	y	
DB1534	Central Mtns, Nebo	16A	Oct. 20–Oct. 28	y	
DB1535	Chalk Creek/East Canyon/Morgan-South Rich	4/5/6	Oct. 20–Oct. 28	y	
DB1536	Fillmore	21A/21B	Oct. 20–Oct. 28	y	
DB1538	Kamas	7	Oct. 20–Oct. 28	y	
DB1539	La Sal, La Sal Mtns	13A	Oct. 20–Oct. 28	y	
DB1540	Monroe	23	Oct. 20–Oct. 28	y	
DB1541	Mt Dutton	24	Oct. 20–Oct. 28	y	
DB1542	Nine Mile	11	Oct. 20–Oct. 28	y	
DB1543	North Slope	8	Oct. 20–Oct. 28	y	
DB1544	Ogden	3	Oct. 20–Oct. 28	y	
DB1545	Oquirrh-Stansbury	18	Oct. 20–Oct. 28	y	
DB1546	Panguitch Lake	28	Oct. 20–Oct. 28	y	
DB1547	Pine Valley	30	Oct. 20–Oct. 28	y	
DB1548	Plateau, Boulder/Kaiparowits	25C/26	Oct. 20–Oct. 28	y	
DB1549	Plateau, Fishlake	25A	Oct. 20–Oct. 28	y	
DB1550	Plateau, Thousand Lakes	25B	Oct. 20–Oct. 28	y	
DB1551	San Juan, Abajo Mtns	14A	Oct. 20–Oct. 28	y	
DB1552	South Slope, Bonanza/Vernal	9B/9D	Oct. 20–Oct. 28	y	

DB1553	South Slope, Yellowstone	9A	Oct. 20–Oct. 28	y	Large Areas of Tribal Land
DB1554	Southwest Desert	20	Oct. 20–Oct. 28	y	
DB1555	Wasatch Mtns, East	17B/17C	Oct. 20–Oct. 28	y	
DB1556	Wasatch Mtns, West	17A	Oct. 20–Oct. 28	y	
DB1557	West Desert, Tintic	19C	Oct. 20–Oct. 28	y	
DB1558	West Desert, West	19A	Oct. 20–Oct. 28	y	
DB1559	Zion	29	Oct. 20–Oct. 28	y	

General Season Muzzleloader Hunts

			2018	2018	2018
Hunt #	Hunt Name	Unit #	Season Dates	Nonres Permits	Notes
DB1560	Beaver	22	Sept. 26–Oct. 4	y	
DB1561	Box Elder	1	Sept. 26–Oct. 4	y	
DB1562	Cache	2	Sept. 26–Oct. 4	y	
DB1563	Central Mtns, Manti/San Rafael	12/16B	Sept. 26–Oct. 4	y	
DB1564	Central Mtns, Nebo	16A	Sept. 26–Oct. 4	y	
DB1565	Chalk Creek/East Canyon/Morgan-South Rich	4/5/6	Sept. 26–Oct. 4	y	
DB1566	Fillmore	21A/21B	Sept. 26–Oct. 4	y	
DB1568	Kamas	7	Sept. 26–Oct. 4	y	
DB1569	La Sal, La Sal Mtns	13A	Sept. 26–Oct. 4	y	
DB1570	Monroe	23	Sept. 26–Oct. 4	y	
DB1571	Mt Dutton	24	Sept. 26–Oct. 4	y	
DB1572	Nine Mile	11	Sept. 26–Oct. 4	y	
DB1573	North Slope	8	Sept. 26–Oct. 4	y	
DB1574	Ogden	3	Sept. 26–Oct. 4	y	
DB1575	Oquirrh-Stansbury	18	Sept. 26–Oct. 4	y	
DB1576	Panguitch Lake	28	Sept. 26–Oct. 4	y	
DB1577	Pine Valley	30	Sept. 26–Oct. 4	y	
DB1578	Plateau, Boulder/Kaiparowits	25C/26	Sept. 26–Oct. 4	y	
DB1579	Plateau, Fishlake	25A	Sept. 26–Oct. 4	y	
DB1580	Plateau, Thousand Lakes	25B	Sept. 26–Oct. 4	y	
DB1581	San Juan, Abajo Mtns	14A	Sept. 26–Oct. 4	y	
DB1582	South Slope, Bonanza/Vernal	9B/9D	Sept. 26–Oct. 4	y	
DB1583	South Slope, Yellowstone	9A	Sept. 26–Oct. 4	y	Large Areas of Tribal Land
DB1584	Southwest Desert	20	Sept. 26–Oct. 4	y	
DB1585	Wasatch Mtns, East	17B/17C	Sept. 26–Oct. 4	y	
DB1586	Wasatch Mtns, West	17A	Sept. 26–Oct. 4	y	
DB1587	West Desert, Tintic	19C	Sept. 26–Oct. 4	y	
DB1588	West Desert, West	19A	Sept. 26–Oct. 4	y	
DB1589	Zion	29	Sept. 26–Oct. 4	y	

Premium Limited Entry Buck Deer

Premium Archery Hunts

			2018	2018	2018
Hunt #	Hunt Name	Unit #	Season Dates	Nonres Permits	Notes
DB1000	Henry Mtns	15	Aug. 18–Sept. 14	y	
DB1001	Paunsaugunt	27	Aug. 18–Sept. 14	y	

Premium Any Legal Weapon Hunts

			2018	2018	2018
Hunt #	Hunt Name	Unit #	Season Dates	Nonres Permits	Notes
DB1002	Antelope Island	1	Nov. 14–Nov. 21	n	
DB1003	Henry Mtns	15	Oct. 20–Oct. 28	y	
DB1004	Paunsaugunt	27	Oct. 20–Oct. 28	y	

Premium Muzzleloader Hunts

			2018	2018	2018
Hunt #	Hunt Name	Unit #	Season Dates	Nonres Permits	Notes
DB1005	Henry Mtns	15	Sept. 26–Oct. 4	y	
DB1006	Paunsaugunt	27	Sept. 26–Oct. 4	y	

Management Buck Hunt

			2018	2018	2018
Hunt #	Hunt Name	Unit #	Season Dates	Nonres Permits	Notes
DB1009	Henry Mtns (any weapon)	15	Oct. 29–Nov. 2	y	
DB1051	Henry Mtns (archery)	15	Aug. 25–Sept. 14	y	
DB1052	Henry Mtns (muzzleloader)	15	Sept. 29–Oct. 4	y	
DB1010	Paunsaugunt	27	Nov. 1–Nov. 5	y	
DB1058	Paunsaugunt, cactus buck	27	Nov. 6–Nov. 18	y	New Hunt

Multi-Season

			2018	2018	2018
Hunt #	Hunt Name	Unit #	Season Dates	Nonres Permits	Notes
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

			2018	2018	2018

Hunt #	Hunt Name	Unit #	Season Dates	Nonres Permits	Notes
DB1011	Book Cliffs	10A/10B/10C	Aug. 18–Sept. 14	y	
DB1012	Fillmore, Oak Creek LE	21C	Aug. 18–Sept. 14	y	
DB1013	La Sal, Dolores Triangle	13B	Nov. 3–Nov. 16	n	
DB1014	San Juan, Elk Ridge	14B	Aug. 18–Sept. 14	y	
DB1015	South Slope, Diamond Mtn	9C	Aug. 18–Sept. 14	y	
DB1016	West Desert, Vernon	19B	Aug. 18–Sept. 14	y	

Limited Entry Any Legal Weapon Hunts

			2018	2018	2018
Hunt #	Hunt Name	Unit #	Season Dates	Nonres Permits	Notes
DB1017	Book Cliffs, North	10A/10C	Oct. 20–Oct. 28	y	
DB1018	Book Cliffs, South	10B	Oct. 20–Oct. 28	y	
DB1019	Fillmore, Oak Creek LE	21C	Oct. 20–Oct. 28	y	
DB1020	La Sal, Dolores Triangle	13B	Nov. 17–Nov. 25	y	
DB1021	North Slope, Summit	8A	Oct. 6–Oct. 18	y	
DB1022	San Juan, Elk Ridge	14B	Oct. 20–Oct. 28	y	
DB1023	South Slope, Diamond Mtn	9C	Oct. 20–Oct. 28	y	
DB1024	West Desert, Vernon	19B	Oct. 20–Oct. 28	y	

Limited Entry Muzzleloader Hunts

			2018	2018	2018
Hunt #	Hunt Name	Unit #	Season Dates	Nonres Permits	Notes
DB1025	Book Cliffs	10A/10B/10C	Sept. 26–Oct. 4	y	
DB1026	Cache, Crawford Mtn	2D	Nov. 17–Dec. 2	y	
DB1029	Fillmore, Oak Creek LE	21C	Sept. 26–Oct. 4	y	
DB1031	La Sal, Dolores Triangle	13B	Nov 28.–Dec. 6	n	
DB1037	San Juan, Elk Ridge	14B	Sept. 26–Oct. 4	y	
DB1038	South Slope, Diamond Mtn	9C	Sept. 26–Oct. 4	y	
DB1042	West Desert, Vernon	19B	Sept. 26–Oct. 4	y	

Multi-Season

			2018	2018	2018
Hunt #	Hunt Name	Unit #	Season Dates	Nonres Permits	Notes
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

			2018	2018	2018
Hunt #	Hunt Name	Unit #	Season Dates	Nonres Permits	Notes
DB1059	Beaver	22	Oct. 31–Nov. 8	y	New Hunt
DB1060	Box Elder	1	Oct. 31–Nov. 8	y	New Hunt
DB1061	Cache	2	Oct. 31–Nov. 8	y	New Hunt
DB1062	Central Mtns, Manti/San Rafael	12/16B	Oct. 31–Nov. 8	y	New Hunt
DB1063	Central Mtns, Nebo	16A	Oct. 31–Nov. 8	y	New Hunt
DB1027	Chalk Creek/East Canyon/Morgan-South Rich	4/5/6	Oct. 31–Nov. 8	y	
DB1028	Fillmore	21A/21B	Oct. 31–Nov. 8	y	
DB1030	Kamas	7	Oct. 31–Nov. 8	y	
DB1064	La Sal, La Sal Mtns	13A	Oct. 31–Nov. 8	y	New Hunt
DB1032	Monroe	23	Oct. 31–Nov. 8	y	
DB1053	Mt Dutton	24	Oct. 31–Nov. 8	y	
DB1033	Nine Mile	11	Oct. 31–Nov. 8	y	
DB1065	North Slope		Oct. 31–Nov. 8	y	New Hunt
DB1054	Ogden	3	Oct. 31–Nov. 8	y	
DB1066	Oquirrh-Stansbury	18	Oct. 31–Nov. 8	y	New Hunt
DB1067	Panguitch Lake	28	Oct. 31–Nov. 8	y	New Hunt
DB1034	Pine Valley	30	Oct. 31–Nov. 8	y	
DB1035	Plateau, Boulder/Kaiparowits	25C/26	Oct. 31–Nov. 8	y	
DB1055	Plateau, Fishlake	25A	Oct. 31–Nov. 8	y	
DB1036	Plateau, Thousand Lakes	25B	Oct. 31–Nov. 8	y	
DB1068	San Juan, Abajo Mtns	14A	Oct. 31–Nov. 8	y	New Hunt
DB1069	South Slope, Bonanza/Vernal	9B/9D	Oct. 31–Nov. 8	y	New Hunt
DB1039	South Slope, Yellowstone	9A	Oct. 31–Nov. 8	y	Large Areas of Tribal Land
DB1040	Southwest Desert	20	Oct. 31–Nov. 8	y	
DB1041	Wasatch Mtns, East	17B/17C	Oct. 31–Nov. 8	y	
DB1070	Wasatch Mtns, West	17A	Oct. 31–Nov. 8	y	New Hunt
DB1071	West Desert, Tintic	19C	Oct. 31–Nov. 8	y	New Hunt
DB1072	West Desert, West	19A	Oct. 31–Nov. 8	y	New Hunt
DB1043	Zion	29	Oct. 31–Nov. 8	y	

(y) At least one nonresident permit in 2018

(n) No nonresident permit in 2018

NOTE: Permit numbers will be determined in May 2018

Limited Entry Pronghorn

Archery Hunts

Hunt #	Hunt Name	2018 Season Dates	2018 Nonres Permits	2018 Notes
PB5000	Beaver	Aug. 18–Sept. 14	n	
PB5001	Book Cliffs, Bitter Creek	Aug. 18–Sept. 14	n	
PB5002	Book Cliffs, South	Aug. 18–Sept. 14	y	
PB5003	Box Elder, Promontory	Aug. 18–Sept. 14	n	
PB5004	Box Elder, Puddle Valley	Aug. 18–Sept. 14	n	boundary change
PB5005	Box Elder, Snowville	Aug. 18–Sept. 14	n	
PB5006	Box Elder, West	Aug. 18–Sept. 14	n	
PB5007	Cache/Morgan-South Rich/Ogden	Aug. 18–Sept. 14	y	
PB5008	Fillmore, Oak Creek South	Aug. 18–Sept. 14	n	name change
PB5009	La Sal, Potash/South Cisco	Aug. 18–Sept. 14	n	
PB5010	Mt Dutton/Paunsaugunt	Aug. 18–Sept. 14	y	boundary change
PB5011	Nine Mile, Anthro-Myton Bench	Aug. 18–Sept. 14	y	
PB5053	Nine Mile, Range Creek	Aug. 18–Sept. 14	n	
PB5012	North Slope, Three Corners/West Daggett	Aug. 18–Sept. 14	y	
PB5054	Panguitch Lake/Zion, North	Aug. 18–Sept. 14	n	
PB5013	Pine Valley	Aug. 18–Sept. 14	y	
PB5014	Plateau, Parker Mtn	Aug. 18–Sept. 14	y	boundary change
PB5055	San Rafael, Desert	Aug. 18–Sept. 14	n	
PB5015	San Rafael, North	Aug. 18–Sept. 14	y	
PB5016	South Slope, Bonanza/Diamond Mtn	Aug. 18–Sept. 14	n	
PB5017	South Slope, Vernal	Aug. 18–Sept. 14	n	
PB5018	Southwest Desert	Aug. 18–Sept. 14	y	
PB5019	West Desert, Riverbed	Aug. 18–Sept. 14	y	
PB5020	West Desert, Rush Valley	Aug. 18–Sept. 14	n	
PB5021	West Desert, Snake Valley	Aug. 18–Sept. 14	y	

Muzzleloader hunts

Hunt #	Hunt Name	2018 Season Dates	2018 Nonres Permits	2018 Notes
PB5022	Cache/Morgan-South Rich/Ogden	Sept. 26–Oct. 4	y	
PB5023	Plateau, Parker Mtn	Sept. 26–Oct. 4	y	boundary and name change
PB5056	San Rafael, North	Sept. 26–Oct. 4	y	
PB5024	Southwest Desert	Sept. 26–Oct. 4	y	

Any Legal Weapon Hunts

Hunt #	Hunt Name	2018 Season Dates	2018 Nonres Permits	2018 Notes
PB5025	Beaver	Sept. 15–Sept. 23	y	
PB5026	Book Cliffs, Bitter Creek	Sept. 15–Sept. 23	y	
PB5027	Book Cliffs, South	Sept. 15–Sept. 23	y	
PB5028	Box Elder, Promontory	Sept. 15–Sept. 23	y	
PB5029	Box Elder, Puddle Valley	Sept. 15–Sept. 23	y	boundary change
PB5030	Box Elder, Snowville	Sept. 15–Sept. 23	y	
PB5031	Box Elder, West	Sept. 15–Sept. 23	y	
PB5032	Cache/Morgan-South Rich/Ogden	Sept. 15–Sept. 23	y	
PB5033	Fillmore, Oak Creek South	Sept. 15–Sept. 23	y	name change
PB5034	Kaiparowits	Sept. 15–Sept. 23	n	
PB5035	La Sal, Potash/South Cisco	Sept. 15–Sept. 23	y	
PB5036	Mt Dutton/Paunsaugunt	Sept. 15–Sept. 23	y	boundary and name change
PB5037	Nine Mile, Anthro-Myton Bench	Sept. 15–Sept. 23	y	
PB5038	Nine Mile, Range Creek	Sept. 15–Sept. 23	y	
PB5039	North Slope, Summit	Sept. 15–Sept. 23	n	
PB5040	North Slope, Three Corners/West Daggett	Sept. 15–Sept. 23	y	
PB5041	Panguitch Lake/Zion, North	Sept. 15–Sept. 23	y	
PB5042	Pine Valley	Sept. 15–Sept. 23	y	
PB5043	Plateau, Parker Mtn	Sept. 15–Sept. 23	y	boundary change
PB5044	San Juan, Hatch Point	Sept. 15–Sept. 23	y	
PB5045	San Rafael, Desert	Sept. 15–Sept. 23	y	
PB5046	San Rafael, North	Sept. 15–Sept. 23	y	
PB5047	South Slope, Bonanza/Diamond Mtn	Sept. 15–Sept. 23	y	
PB5048	South Slope, Vernal	Sept. 15–Sept. 23	y	
PB5049	Southwest Desert	Sept. 15–Sept. 23	y	
PB5050	West Desert, Riverbed	Sept. 15–Sept. 23	y	
PB5051	West Desert, Rush Valley	Sept. 15–Sept. 23	y	
PB5052	West Desert, Snake Valley	Sept. 15–Sept. 23	y	

(y) At least one nonresident permit in 2018

(n) No nonresident permit in 2018

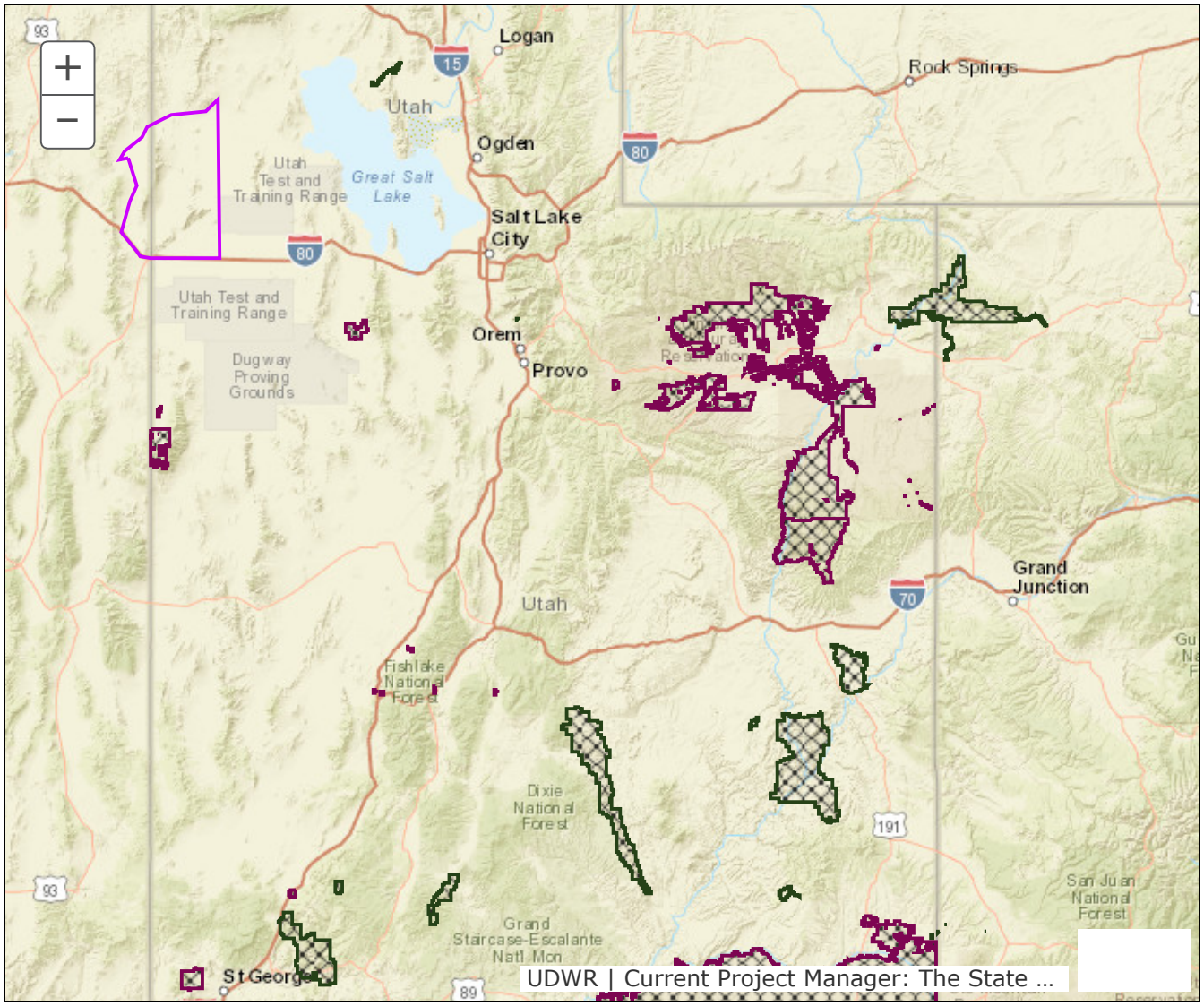
NOTE: Permit numbers will be determined in May 2018

Wildlife UTAH DIVISION OF WILDLIFE RESOURCES

BOUNDARY RECOMMENDATION

UNIT Box Elder, Pilot Mtn

SPECIES Rocky Mountain bighorn sheep



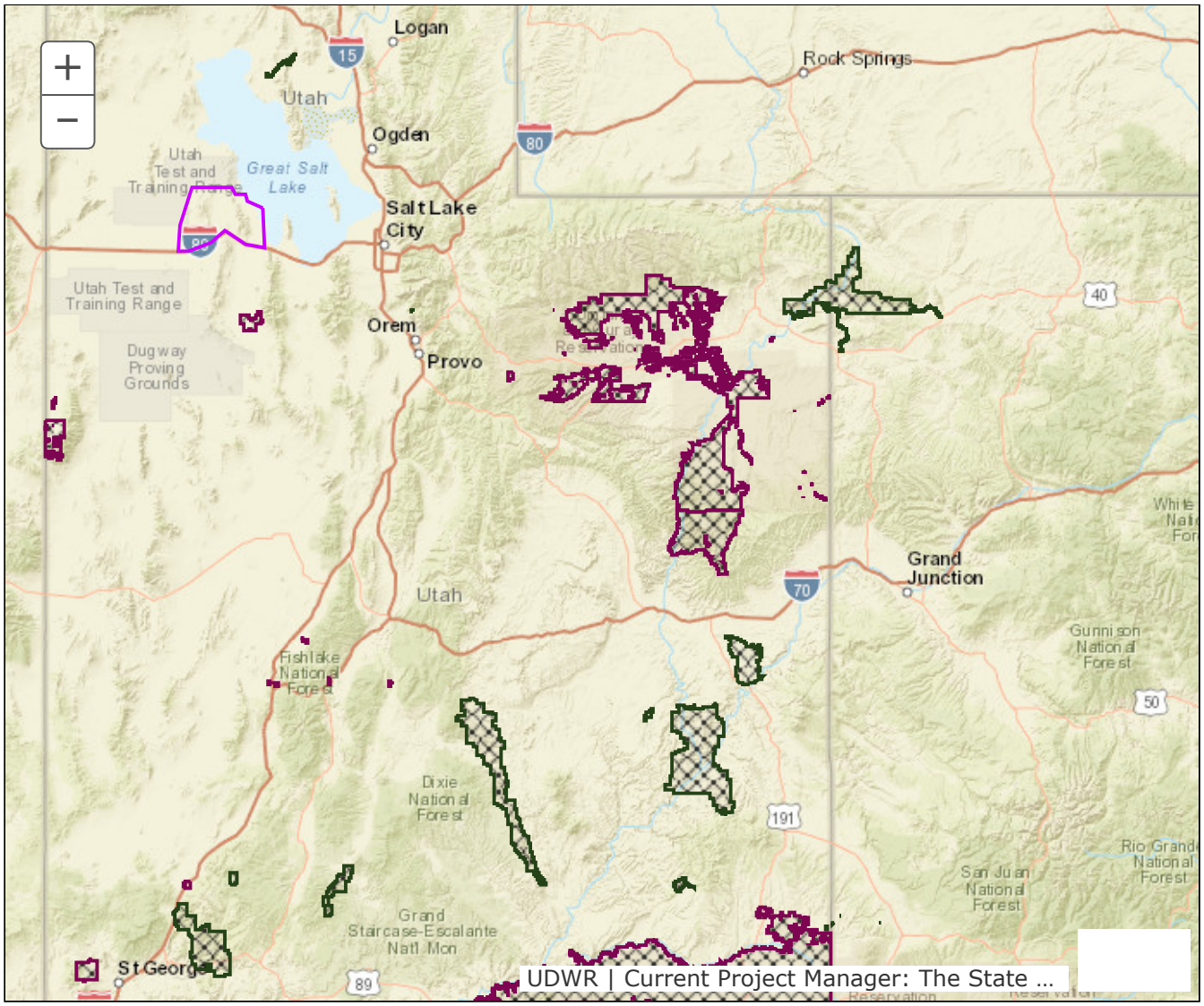
Updated Boundary: Box Elder and Tooele counties—Boundary begins at SR-30 and the Utah-Nevada state line; east on SR-30 to the township line between R15W and R16W; south on this line to I-80; west on I-80 to Pilot Creek Valley road; north along this road to SR-30; east on SR-30 to the Utah-Nevada state line. Elk hunters with this permit may hunt Nevada's portion of this interstate unit (091) and abide by Nevada laws. USGS 1:100,000 Maps: Newfoundland Mtns., Bonneville Salt Flats, Wells, Wendover. Boundary questions? Call the Ogden office, 801-476-2740. Nevada hunt regulation questions? Call NDOW, (775) 777-2300.

Wildlife UTAH DIVISION OF WILDLIFE RESOURCES

BOUNDARY RECOMMENDATION

UNIT Box Elder, Puddle Valley

SPECIES Pronghorn



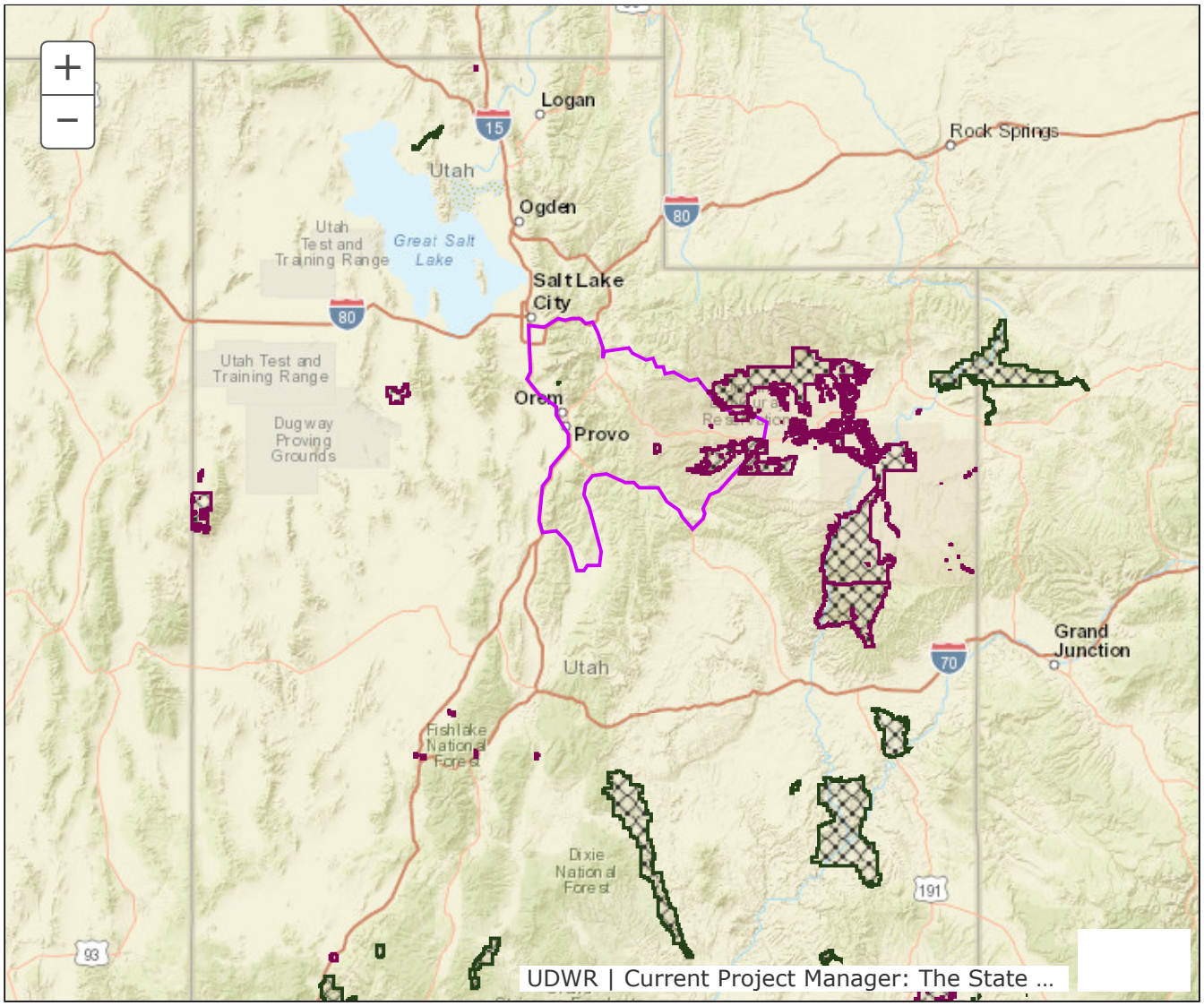
Updated Boundary: Tooele County--Boundary begins at I-80 and the Rowley road(AMAX Magnesium) at Exit 77; north from this exit cross-country to the shoreline of the Great Salt Lake; north along this shoreline to Utah Test and Training Range boundary; west along boundary to the USPCI road; south on this road to I-80; east on I-80 to the Rowley road at Exit 77.

Wildlife UTAH DIVISION OF WILDLIFE RESOURCES

BOUNDARY RECOMMENDATION

UNIT Central Mts, Nebo/Wasatch

SPECIES Rocky Mountain bighorn sheep



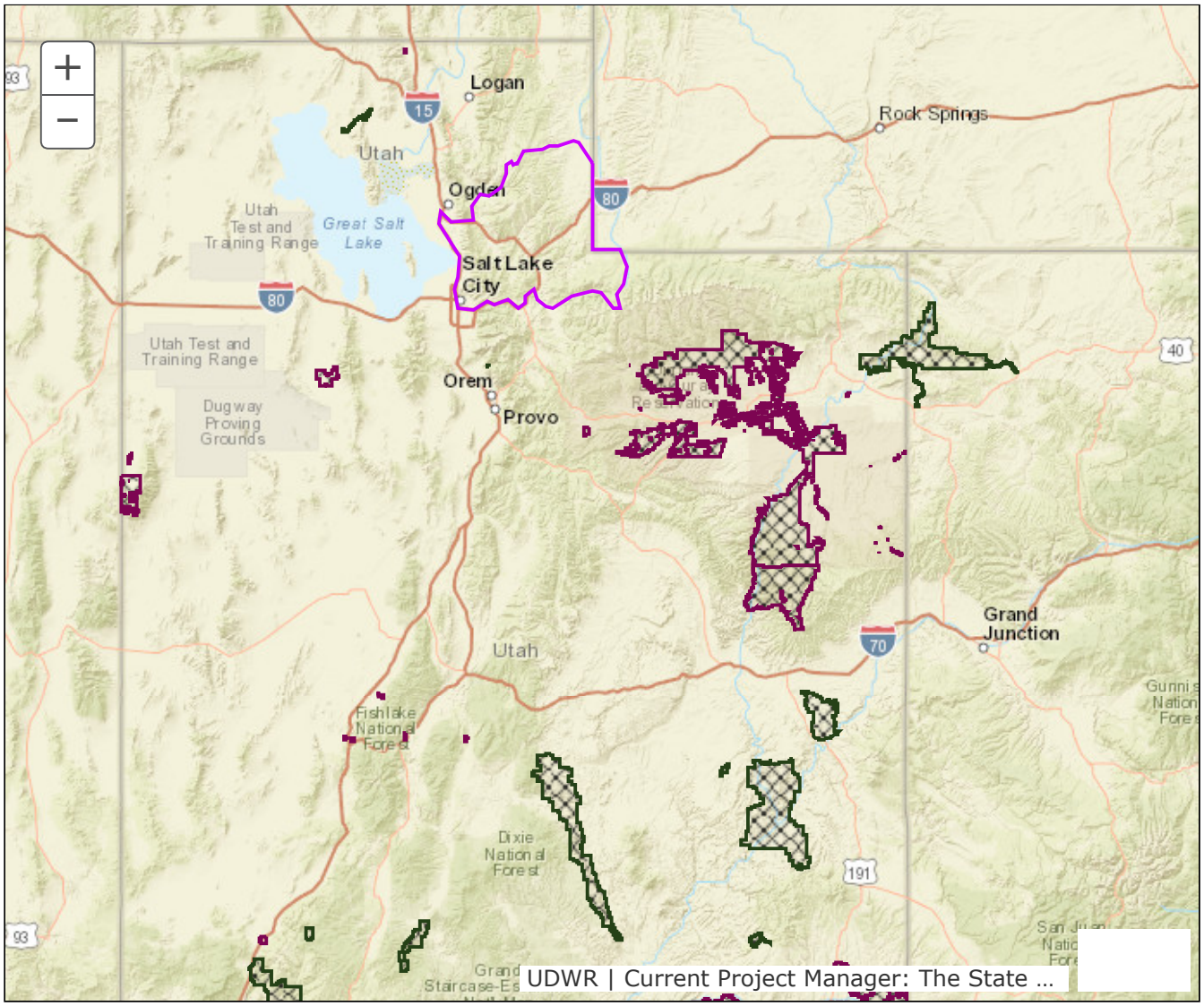
Updated Boundary: Carbon, Duchesne, Juab, Sanpete, Summit, Utah, Wasatch counties--Boundary begins at I-80 and I-15 in Salt Lake City; east on I-80 to US-40; south on US-40 to SR-32; east on SR-32 to SR-35; southeast on SR-35 to SR-87; south on SR-87 to Duchesne and US-191; south on US-191 to US-6; northwest on US-6 to US-89 near Thistle; south on US-89 to Mount Pleasant and SR-116; west on SR-116 to Moroni and SR-132; northwest on SR-132 to I-15 at Nephi; north on I-15 to I-80 in Salt Lake City. EXCLUDING ALL NATIVE AMERICAN TRUST LAND WITHIN THIS BOUNDARY. USGS 1:100,000 Maps: Duchesne, Nephi, Price, Provo, Salt Lake City. Boundary questions? Call the Springville office, 801-491-5678.

Wildlife UTAH DIVISION OF WILDLIFE RESOURCES

BOUNDARY RECOMMENDATION

UNIT Chalk Creek/East Canyon/Morgan-South Rich

SPECIES Deer



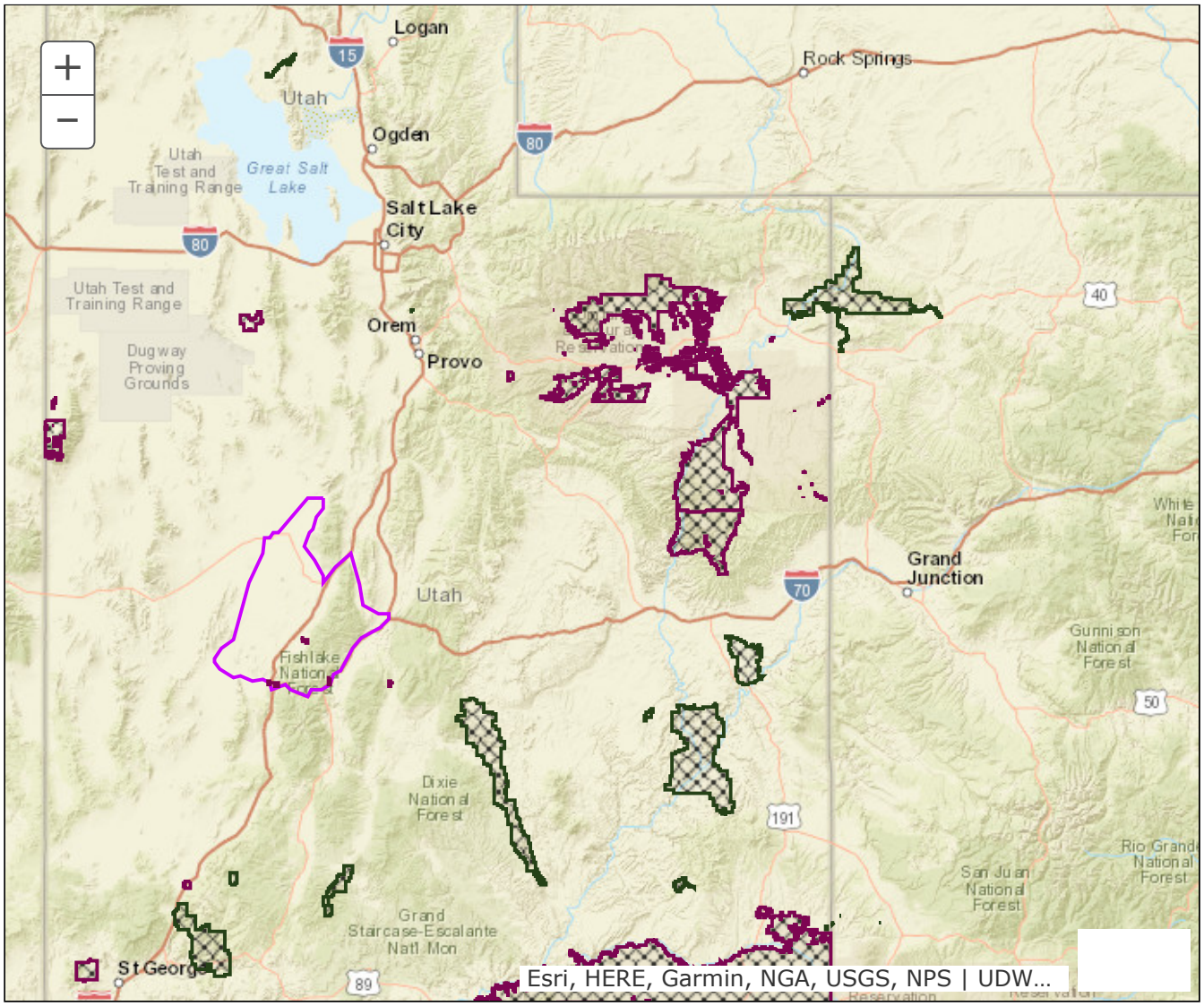
Updated Boundary: Davis, Duchesne, Morgan, Rich, Salt Lake, Summit and Weber counties —Boundary begins at I-15 and I-84 near Ogden; east on I-84 to Exit 92 and SR-167 (Trappers Loop road); north on SR-167 to SR-39; northeast on SR-39 to SR-16 near Woodruff; southeast on SR-16 to the Utah-Wyoming state line; south and east on this state line to SR-150; south on SR-150 to Pass Lake and the Weber River Trail head; west on this trail to Holiday Park and Weber Canyon road (CR-2596); west on this road to SR-32 at Oakley; northwest on SR-32 to I-80; west on I-80 to I-15; north on I-15 to I-84 near Ogden. This hunt is comprised of all or largely private property. Excludes all CWMUs. USGS 1:100,000 Maps: Kings Peak, Logan, Ogden, Promontory Point, Salt Lake City. Boundary questions? Call the Ogden office, 801-476-2740.

Wildlife UTAH DIVISION OF WILDLIFE RESOURCES

BOUNDARY RECOMMENDATION

UNIT Fillmore

SPECIES Deer



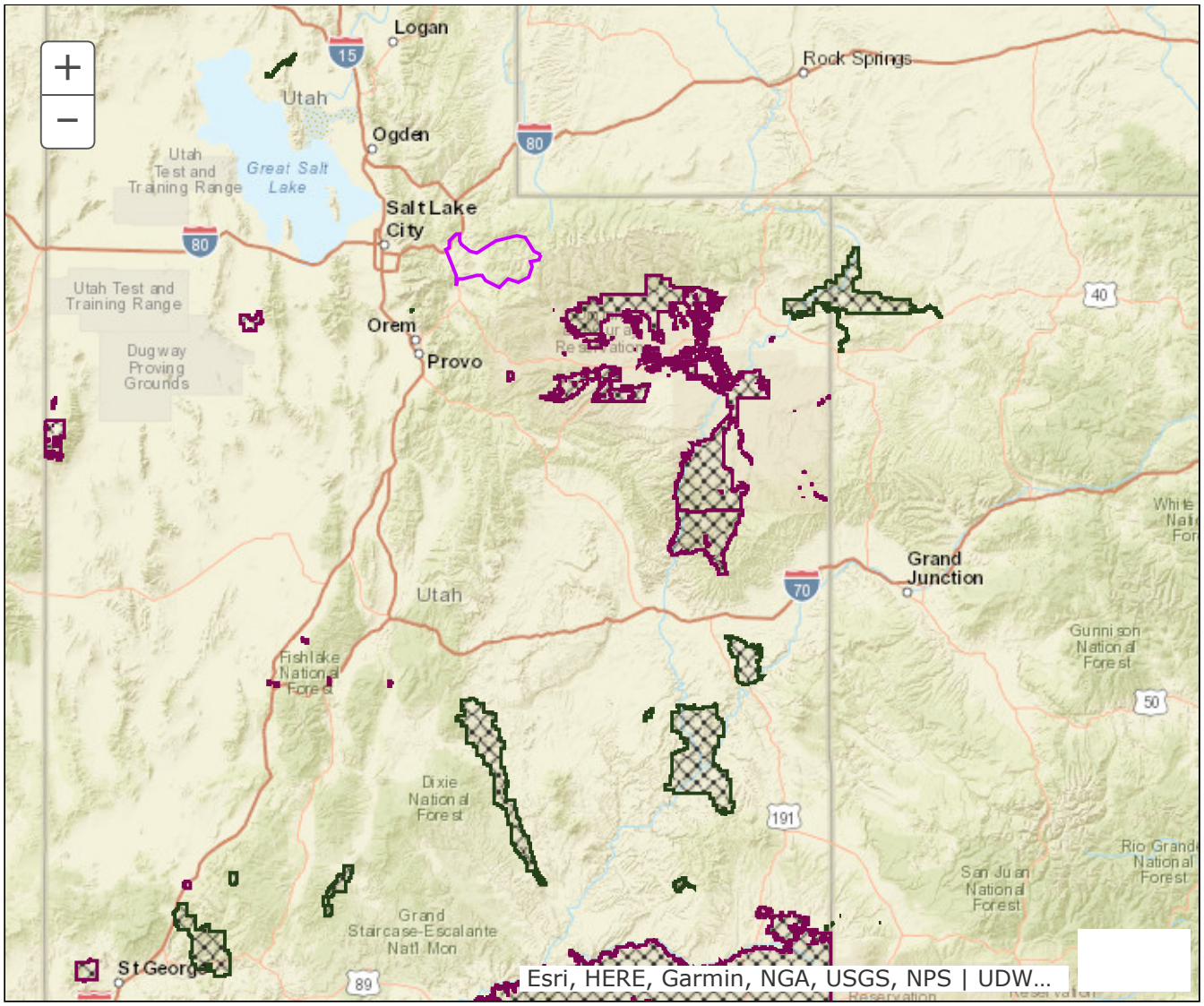
Updated Boundary: Juab, Millard and Sevier counties--Boundary begins at SR-132 and SR-125 (300 E in Leamington); west on SR-132 to US-6; south on US-6 to SR-257; south on SR-257 to the Black Rock road; east on this road to I-15; south on I-15 to I-70; east and north on I-70 to US-89; north on US-89 to US-50 in Salina; north on US-50 to I-15 near Scipio; south on I-15 to Exit 178 and US-50; south on US-50 to Whiskey Creek Road; north on this road to McCormick Road (CR-4549); north on this road to SR-125; north on SR-125 to SR-132 in Leamington. USGS 1:100,000 Maps: Delta, Lynndyl, Nephi, Richfield, Salina. Boundary Questions? Call Cedar City office, 435-865-6100.

Wildlife UTAH DIVISION OF WILDLIFE RESOURCES

BOUNDARY RECOMMENDATION

UNIT Kamas

SPECIES Deer



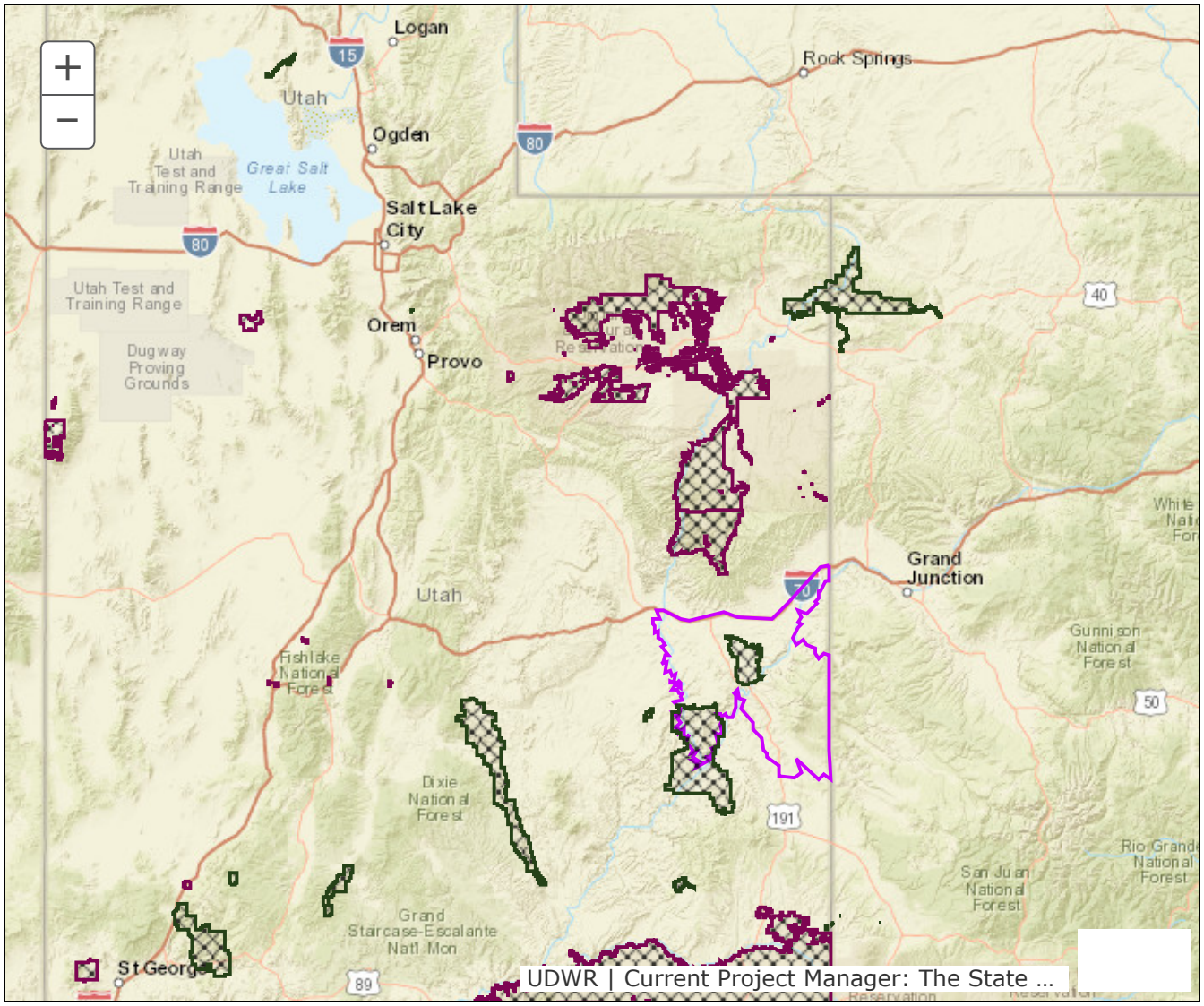
Updated Boundary: Summit and Wasatch counties—Boundary begins at I-80 and SR-32 at Wanship; south on SR-32 to Oakley and the Weber Canyon road (CR-2596); east on this road to Holiday Park and the Weber River Trail; east on this trail to SR-150 near Pass Lake; south and west on SR-150 to North Fork Provo River; south along this river to the Provo River; south along this river to SR-35; west on SR-35 to Francis and SR-32; west on SR-32 to US-40; north on US-40 to I-80; north on I-80 to SR-32 at Wanship. Excludes all CWMUs. USGS 1:100,000 Maps: Kings Peak, Salt Lake City. Boundary questions? Call the Ogden office, 801-476-2740.

Wildlife UTAH DIVISION OF WILDLIFE RESOURCES

BOUNDARY RECOMMENDATION

UNIT La Sal, La Sal Mtns

SPECIES Mountain goat



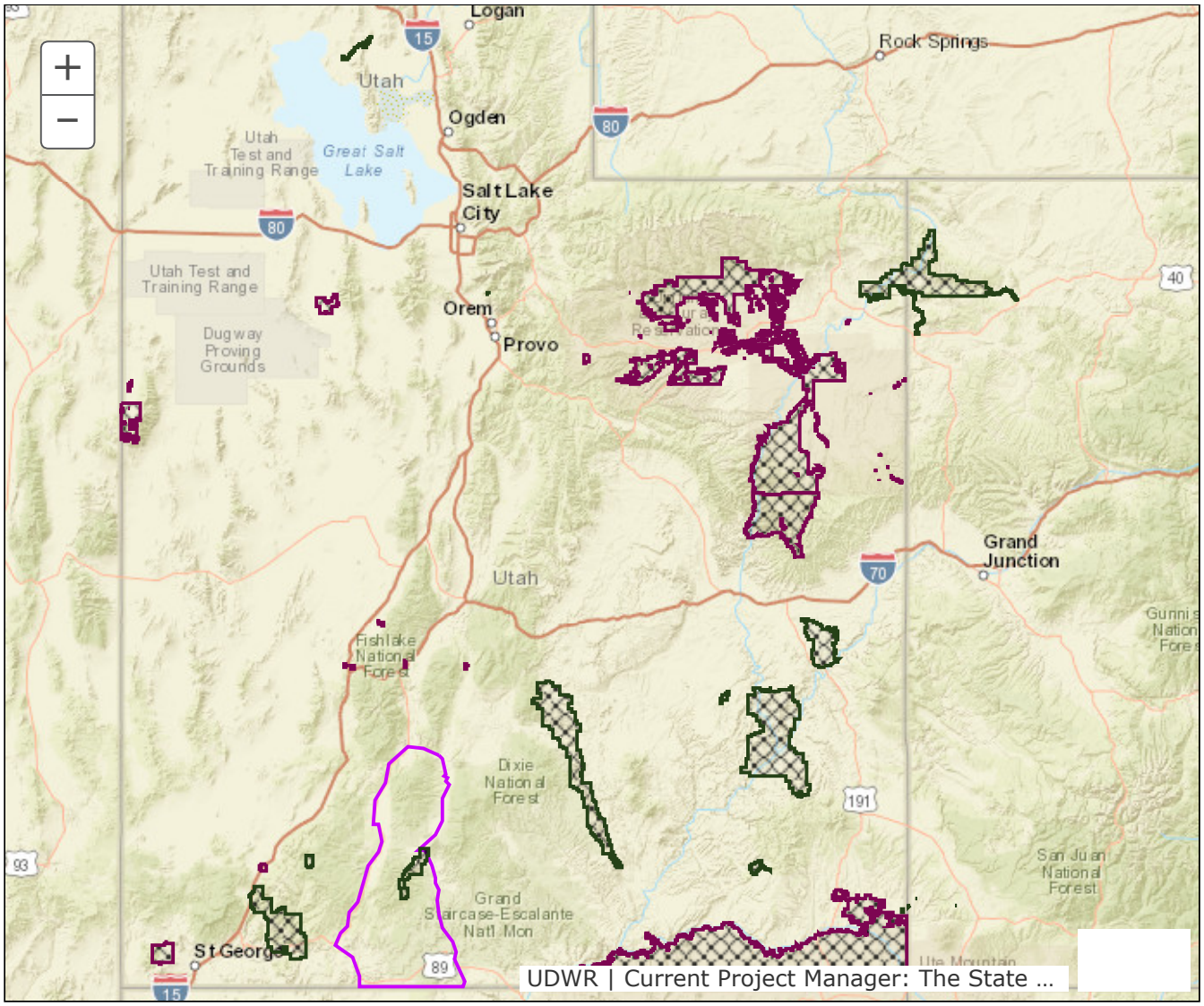
Updated Boundary: Grand, San Juan and Wayne counties--Boundary begins at I-70 and the Green River; south along this river to the Colorado River; northeast along this river to US-191; south on US-191 to the Big Indian road; east on this road to the Lisbon Valley road; southeast on this road to the Island Mesa road; east on this road to the Utah-Colorado state line; north on this state line to the Dolores River; west along this river to the Colorado River; north along this river to the Utah-Colorado state line; north on this state line to I-70; west on I-70 to the Green River. Excludes all CWMUs. USGS 1:100,000 Maps: La Sal, Moab, San Rafael Desert, Westwater. Boundary questions? Call Price office, 435-613-3700.

Wildlife UTAH DIVISION OF WILDLIFE RESOURCES

BOUNDARY RECOMMENDATION

UNIT Mt Dutton/Paunsaugunt

SPECIES Pronghorn



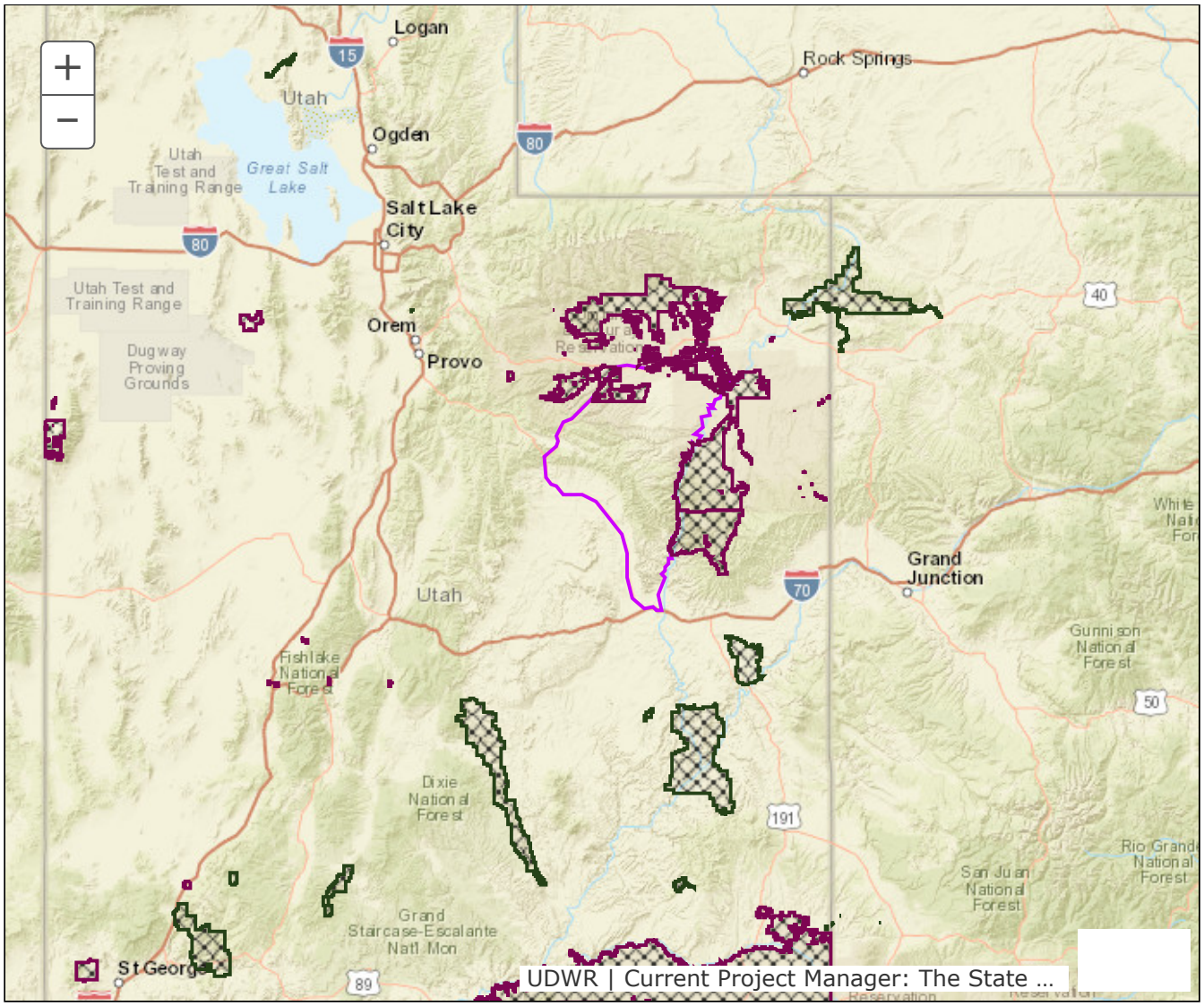
Updated Boundary: Garfield, Kane and Piute counties—Boundary begins at US-89 and SR-62; south on US-89 to US-89A in Kanab; south on US-89A to the Utah-Arizona state line; east on this state line to the Paria River; north along this river to SR-12; west on SR-12 to the Widtsoe-Antimony road; north on this road to SR-22; north on SR-22 to SR-62; west on SR-62 to US-89. USGS 1:100,000 Maps: Beaver, Escalante, Kanab, Loa, Panguitch. Boundary questions? Call the Cedar City office, 435-865-6100.

Wildlife UTAH DIVISION OF WILDLIFE RESOURCES

BOUNDARY RECOMMENDATION

UNIT Nine Mile

SPECIES Deer



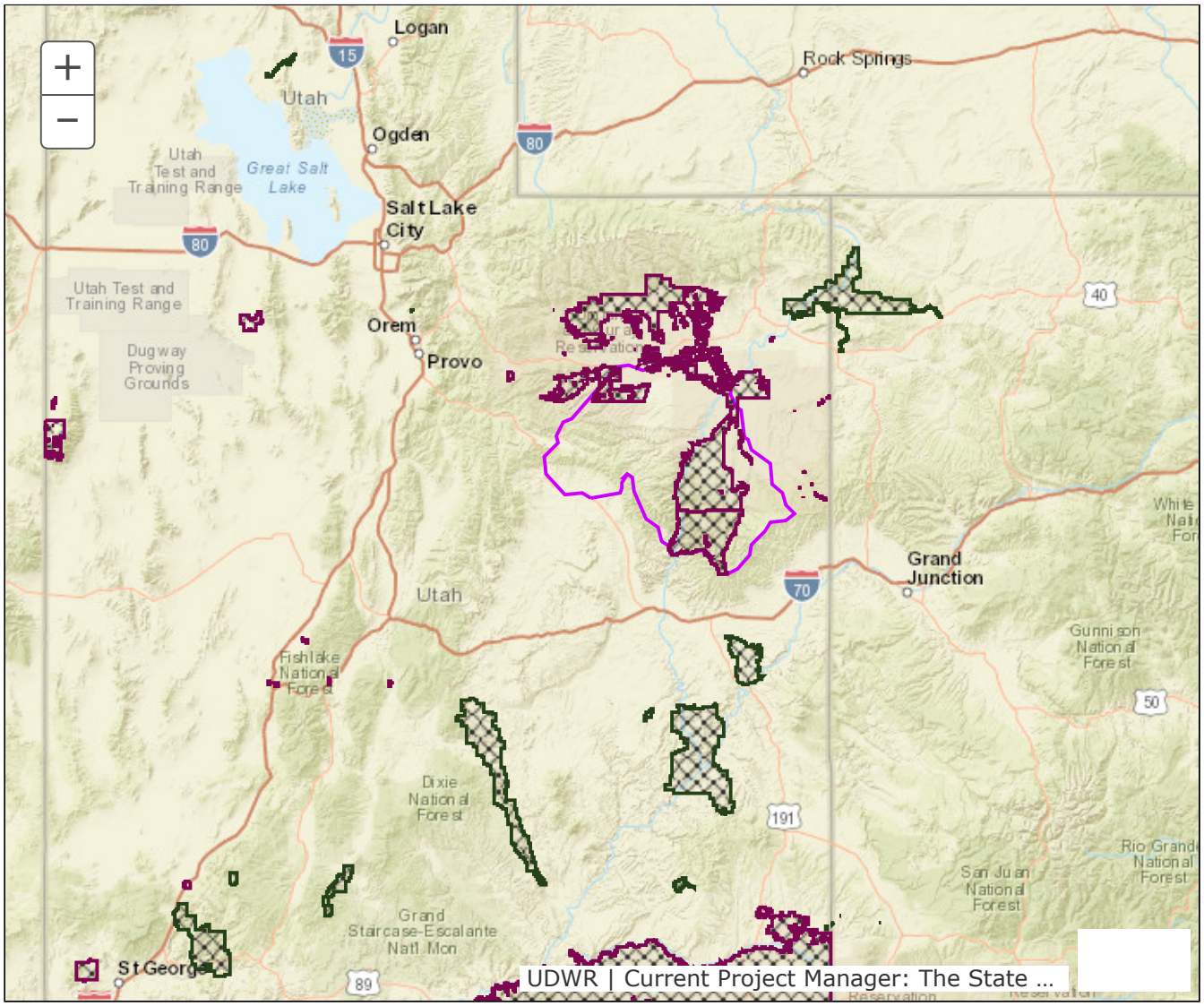
Updated Boundary: Carbon, Duchesne, Emery and Uintah counties--Boundary begins at US-40 and US-191 in Duchesne; southwest on US-191 to US-6; southeast on US-6 to I-70; east on I-70 to Exit 164 and SR-19 near the town of Green River; north and west on SR-19 to Hastings Road; north on this road to the Swasey boat ramp and the Green River; north along this river to the Duchesne River; west along this river to US-40 at Myton; west on US-40 to US-191 in Duchesne. EXCLUDES ALL NATIVE AMERICAN TRUST LANDS WITHIN THIS BOUNDARY. Excludes all CWMUs. USGS 1:100,000 Maps: Duchesne, Huntington, Price, Seep Ridge, Vernal.; Boundary questions? Call the Vernal office, 435-781-9453 or the Price office, 435-613-3700.

Wildlife UTAH DIVISION OF WILDLIFE RESOURCES

BOUNDARY RECOMMENDATION

UNIT Nine Mile, Jack Creek

SPECIES Rocky Mountain bighorn sheep



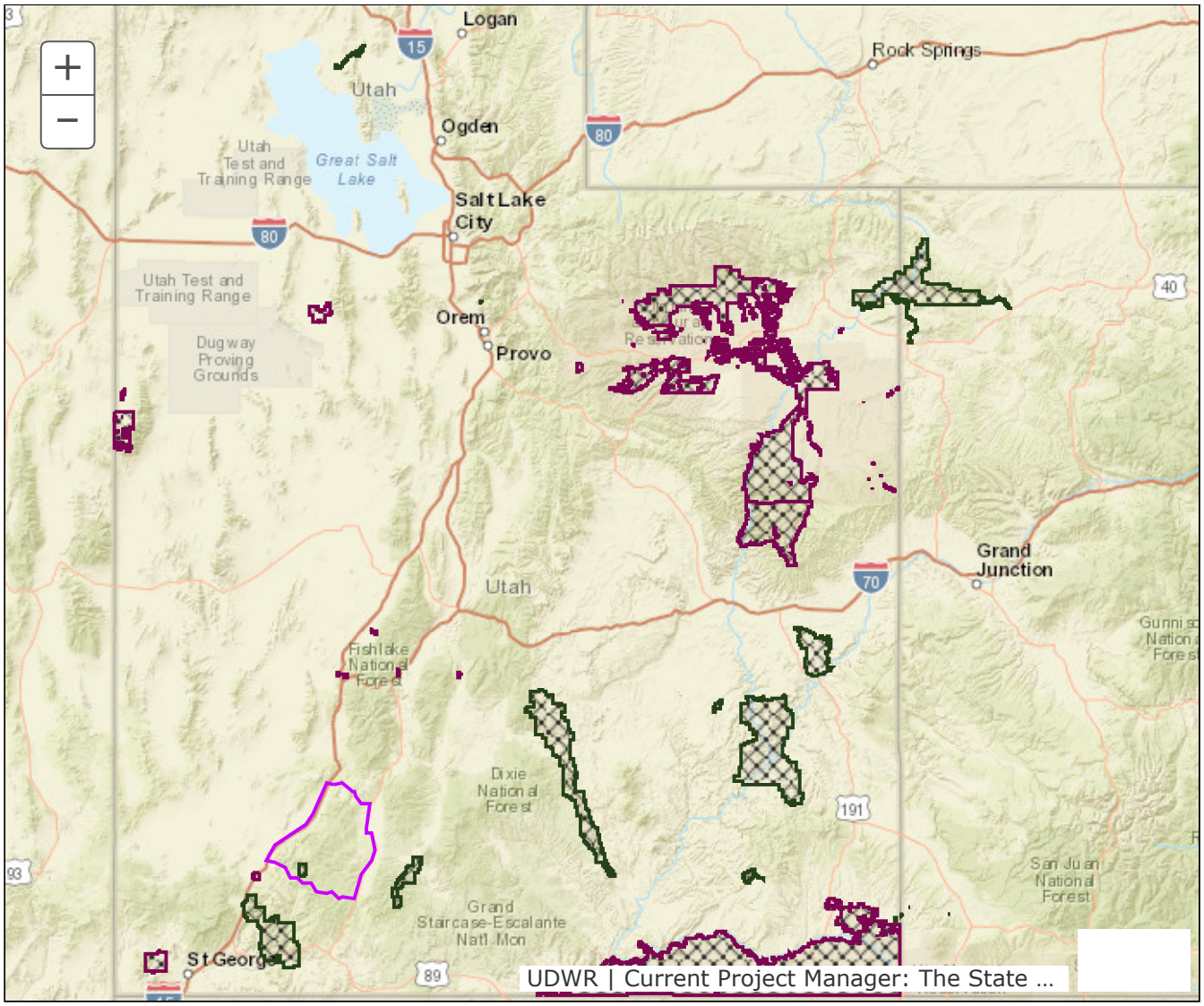
Updated Boundary: Carbon, Duchesne, Emery and Uintah counties--Boundary begins at US-40 and US-191 in Duchesne; southwest on US-191 to US-6; southeast on US-6 to SR-123; east and north on SR-123 through the town of Sunnyside to the Water Canyon/Bruin Point Road; northeast on this road to the summit at Bruin Point and the headwaters of Range Creek; southeast along the Range Creek drainage bottom to the Green River; south along this river to Coal Creek and the Uintah and Ouray Indian Reservation boundary; east along this boundary to the drainage divide at Hells Hole/Head of Sego Canyon; northeast along the drainage divide and summit to Diamond Ridge; northeast continuing along the drainage divide and summit to the Seep Ridge Road; northwest along the Seep Ridge Road to the White River; west along this river to the Green River; north along this river to the Duchesne River; west along this river to US-40 at Myton; west on US-40 to US-191 in Duchesne. EXCLUDES ALL NATIVE AMERICAN TRUST LANDS WITHIN THIS BOUNDARY. Excludes all CWMUs. USGS 1:100,000 Maps: Duchesne, Huntington, Price, Seep Ridge, Vernal, Westwater. Boundary questions? Call the Price office, 435-613-3700

Wildlife UTAH DIVISION OF WILDLIFE RESOURCES

BOUNDARY RECOMMENDATION

UNIT Panguitch Lake

SPECIES Deer



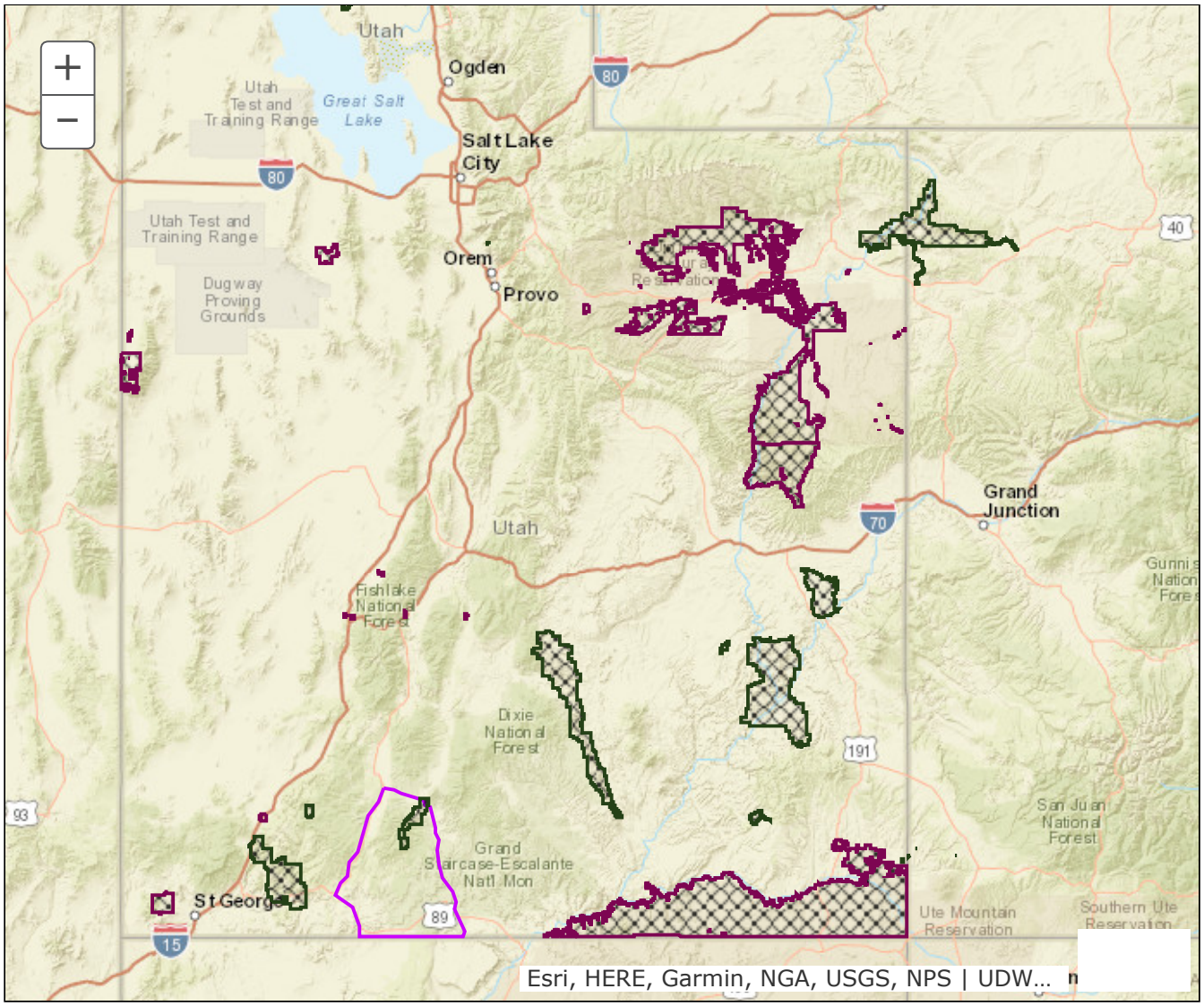
Updated Boundary: Garfield, Iron and Kane counties—Boundary begins at US-89 and SR-14; north on US-89 to SR-20; west on SR-20 to I-15; south on I-15 to SR-14; east on SR-14 to US-89. USGS 1:100,000 Maps: Beaver, Cedar City, Panguitch. Boundary questions? Call the Cedar City office, 435-865-6100.

Wildlife UTAH DIVISION OF WILDLIFE RESOURCES

BOUNDARY RECOMMENDATION

UNIT Paunsaugunt

SPECIES Deer



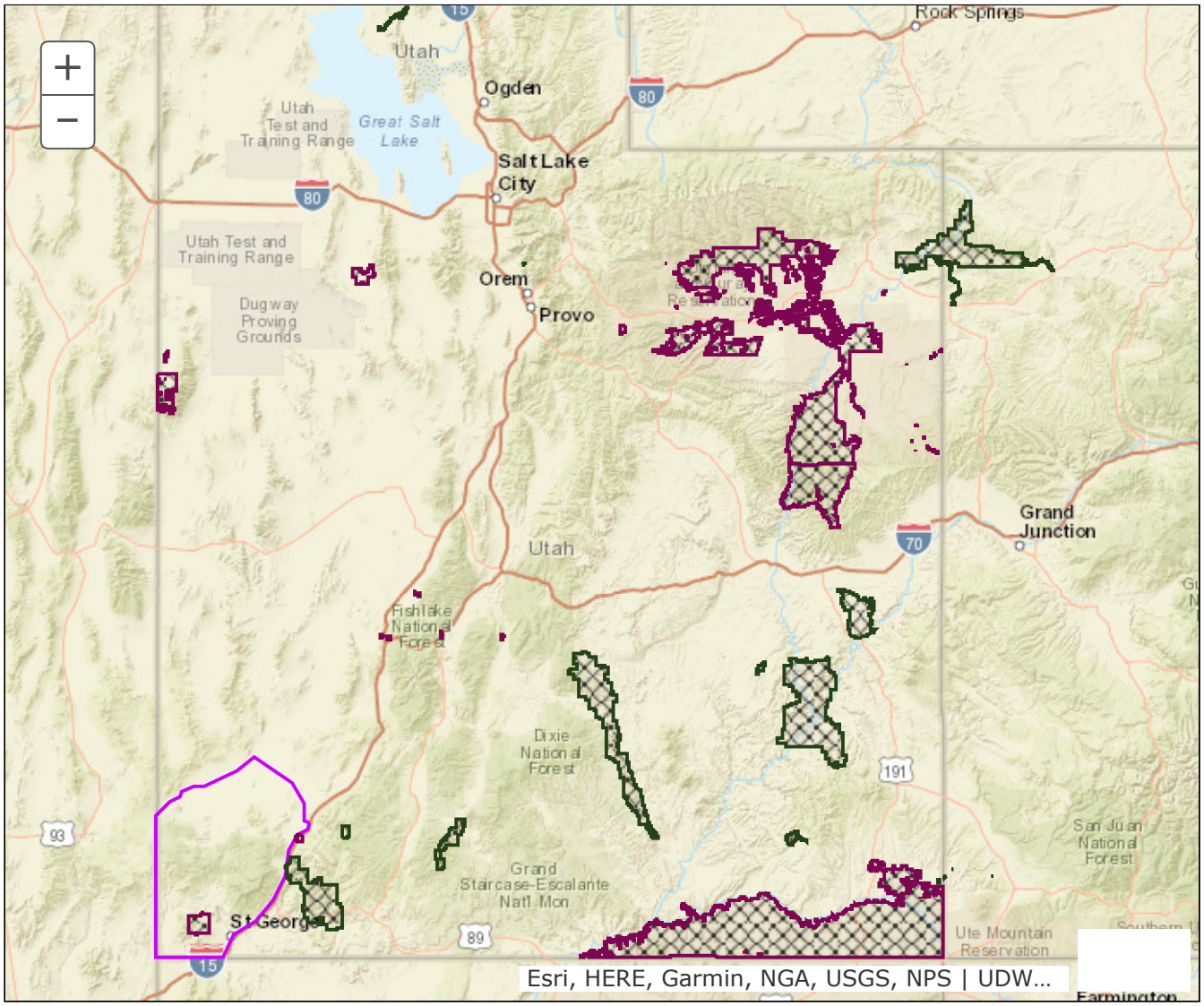
Updated Boundary: Garfield and Kane counties—Boundary begins at US-89A and the Utah-Arizona state line; north on US-89A to US-89; north on US-89 to SR-12; east on SR-12 to the Paria River; south along the Paria River to the Utah-Arizona state line; west along this state line to US-89A. USGS 1:100,000 Maps: Kanab, Panguitch. Boundary questions? Call the Cedar City office, 435-865-6100.

Wildlife UTAH DIVISION OF WILDLIFE RESOURCES

BOUNDARY RECOMMENDATION

UNIT Pine Valley

SPECIES Deer



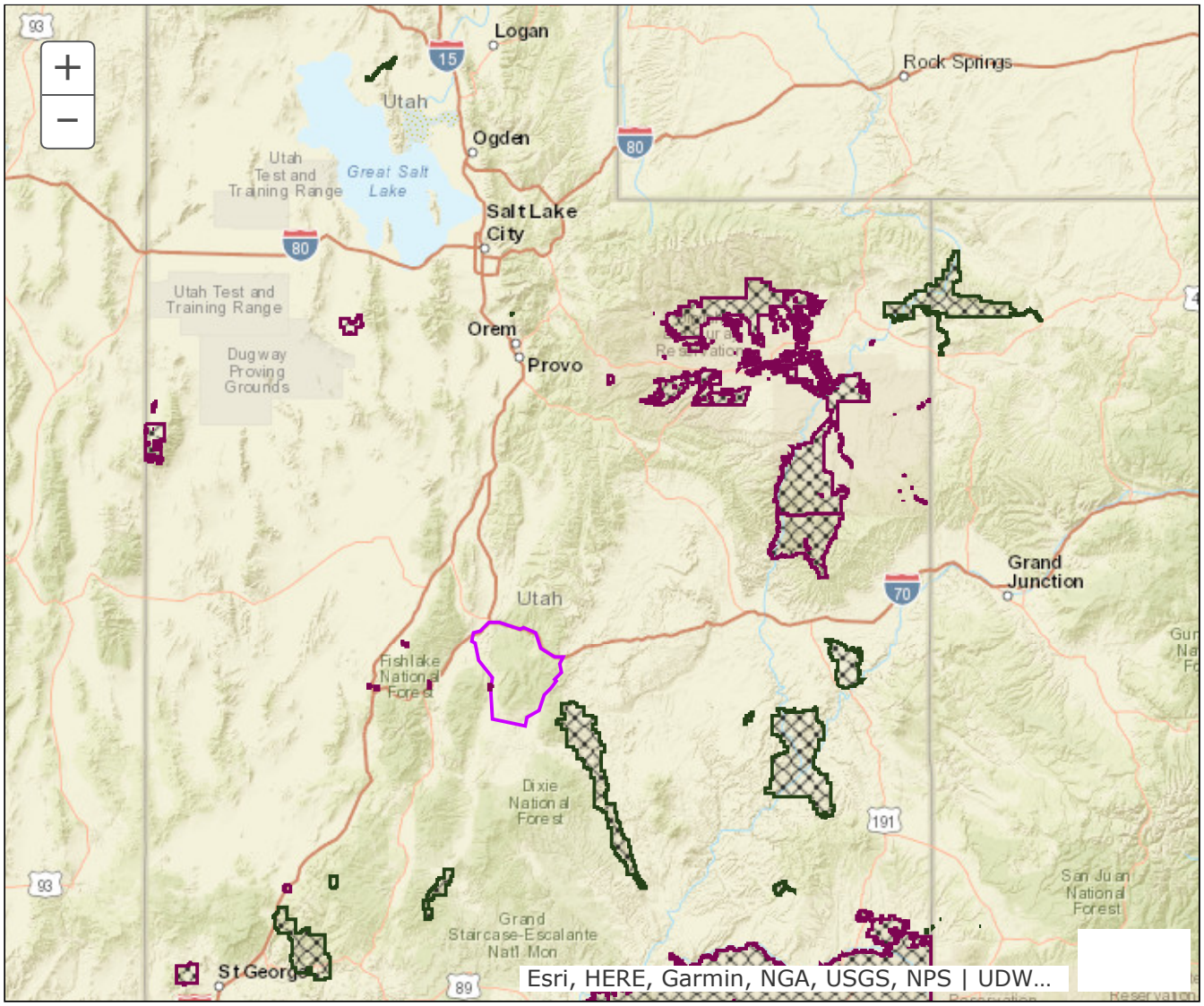
Updated Boundary: Iron and Washington counties—Boundary begins at the Utah-Arizona state line and I-15; north on I-15 to SR-56; west on SR-56 to the Lund highway; northwest on this highway to Lund and the Union Pacific railroad tracks; southwest along these tracks to the Utah-Nevada state line; south on this state line to the Utah-Arizona state line; east on this state line to I-15. EXCLUDES ALL NATIVE AMERICAN TRUST LANDS WITHIN THIS BOUNDARY. Excludes all CWMUs. USGS 1:100,000 Maps: Caliente, Cedar City, Clover Mountains, Saint George. Boundary questions? Call the Cedar City office, 435-865-6100.

Wildlife UTAH DIVISION OF WILDLIFE RESOURCES

BOUNDARY RECOMMENDATION

UNIT Plateau, Fishlake

SPECIES Deer



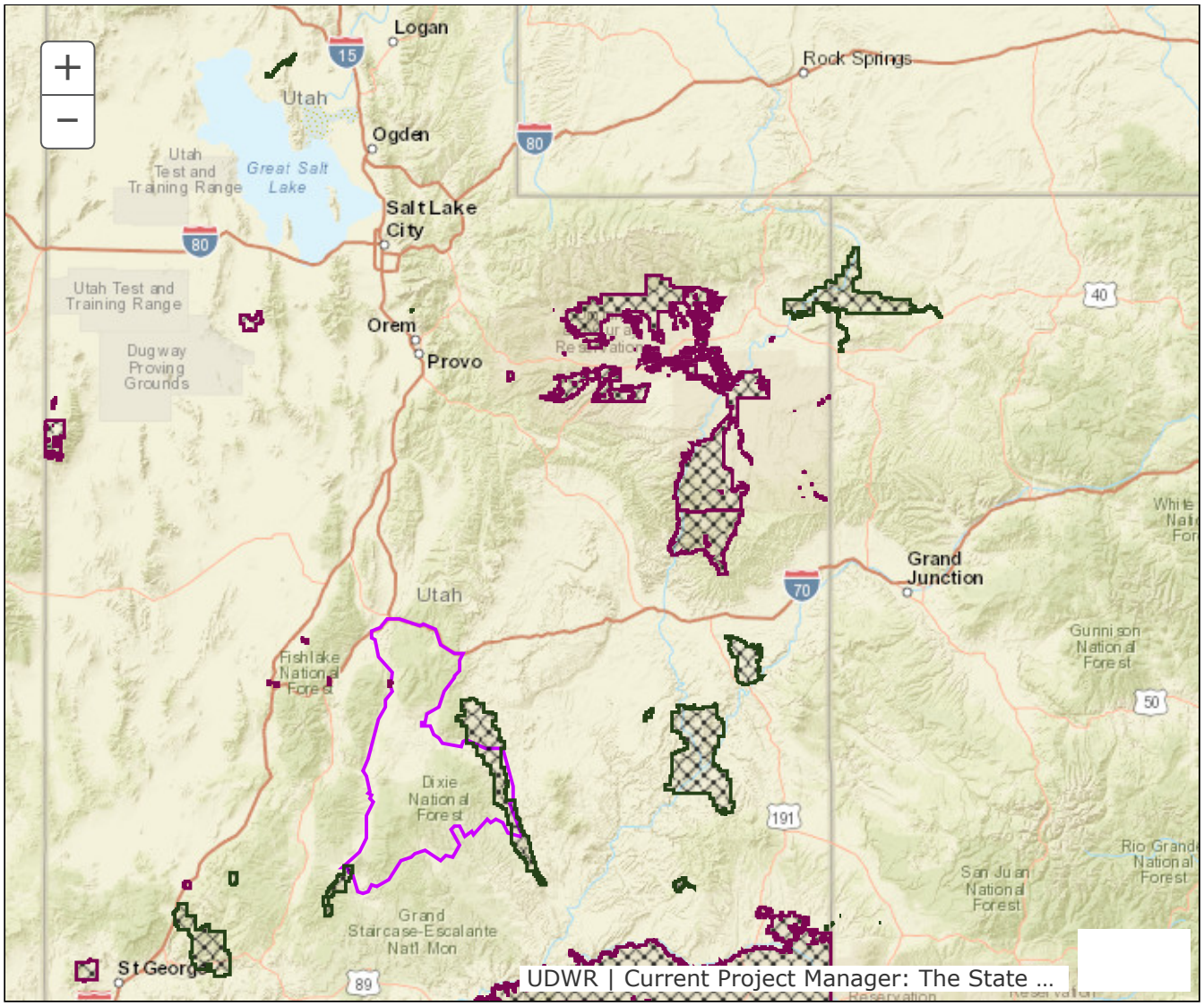
Updated Boundary: Piute, Sevier and Wayne counties—Boundary begins at SR-24 and SR-72; west and north on SR-24 to I-70; east on I-70 to SR-72; south on SR-72 to SR-24. Excludes all CWMUs. USGS 1:100,000 Maps: Loa, Salina. Boundary questions? Call the Cedar City office, 435-865-6100.

Wildlife UTAH DIVISION OF WILDLIFE RESOURCES

BOUNDARY RECOMMENDATION

UNIT Plateau, Parker Mtn

SPECIES Pronghorn



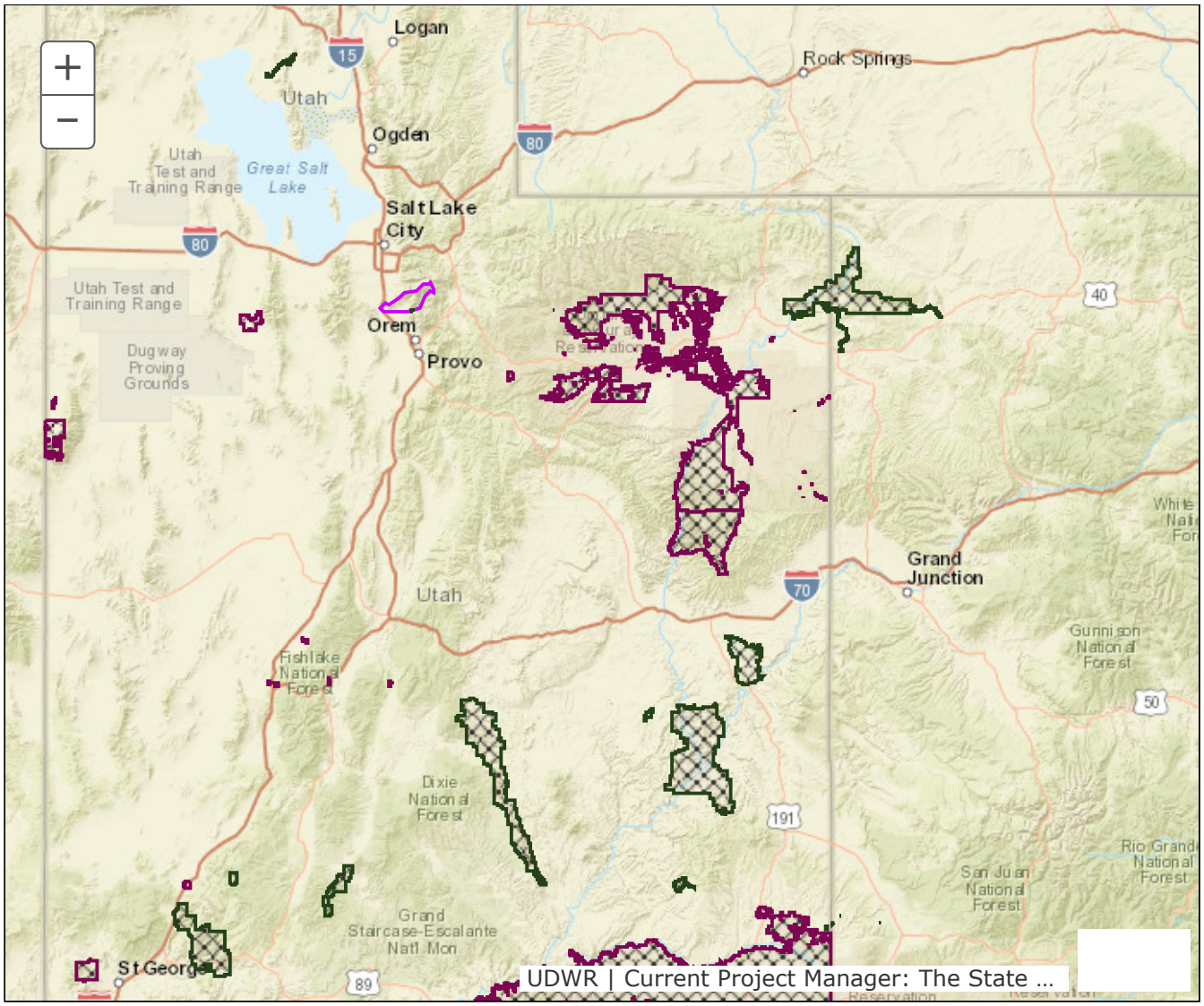
Updated Boundary: Garfield, Piute, Sevier and Wayne counties--Boundary begins at I-70 and US-89 near Sigurd; south on US-89 to SR-24; south on SR-24 to SR-62; south on SR-62 to SR-22; south on SR-22 to SR-12; east and north on SR-12 to SR-24; west on SR-24 to SR-72; north on SR-72 to I-70; west on I-70 to US-89 near Sigurd.

Wildlife UTAH DIVISION OF WILDLIFE RESOURCES

BOUNDARY RECOMMENDATION

UNIT Wasatch Mtns, Box Elder Peak

SPECIES Mountain goat



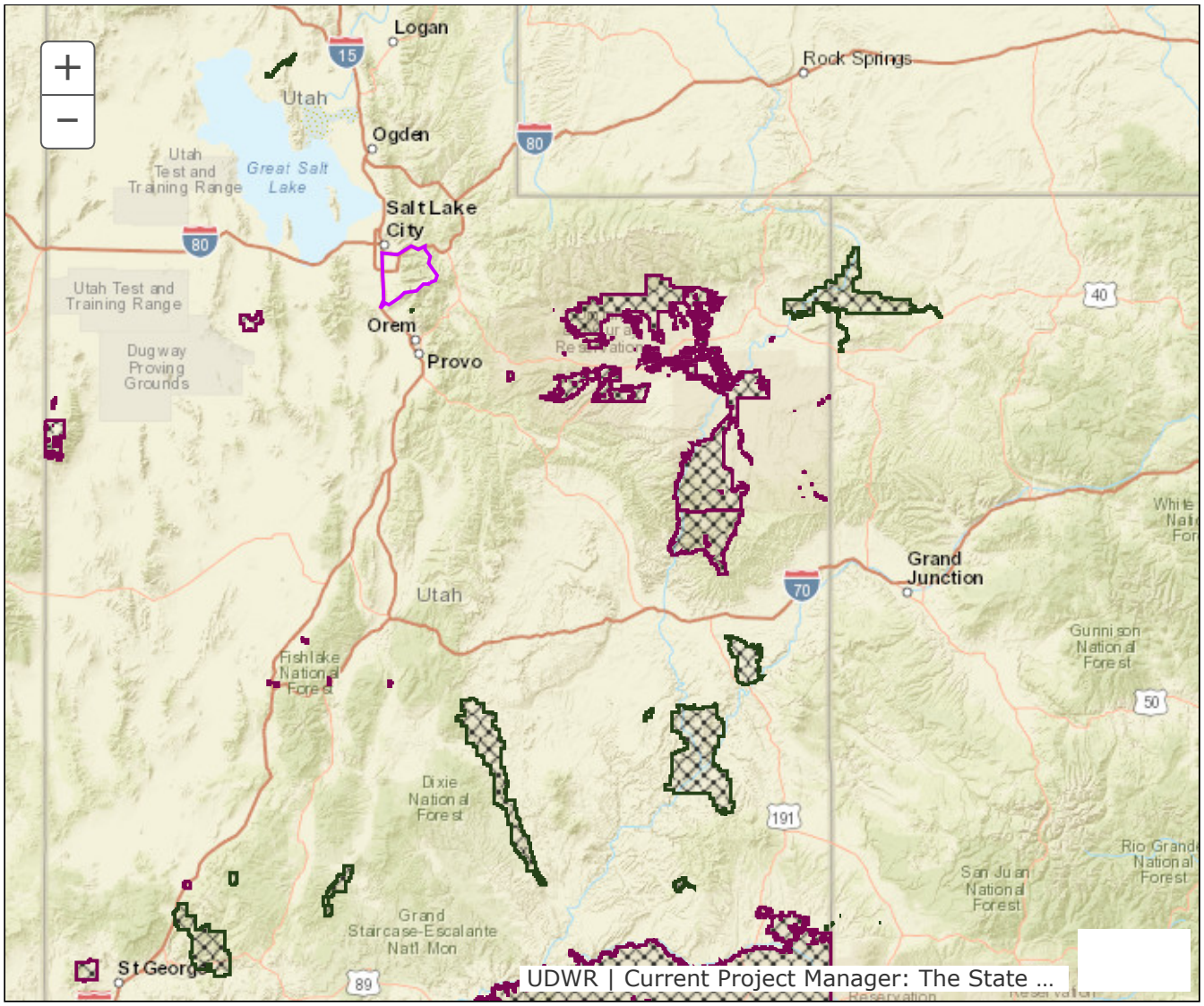
Updated Boundary: Utah County—Boundary begins at I-15 and the Salt Lake-Utah county line; east along this county line to the Utah-Wasatch county line; south along this county line to "Pole Line Pass" on the Snake Creek-North Fork American Fork Canyon road; west on this road to SR-92; west on SR-92 to I-15; north on I-15 to the Salt Lake-Utah county line. USGS 1:100,000 Maps: Provo, Salt Lake City. Boundary questions? Call the Springville office, 801-491-5678.

Wildlife UTAH DIVISION OF WILDLIFE RESOURCES

BOUNDARY RECOMMENDATION

UNIT Wasatch Mtns, Lone Peak

SPECIES Mountain goat



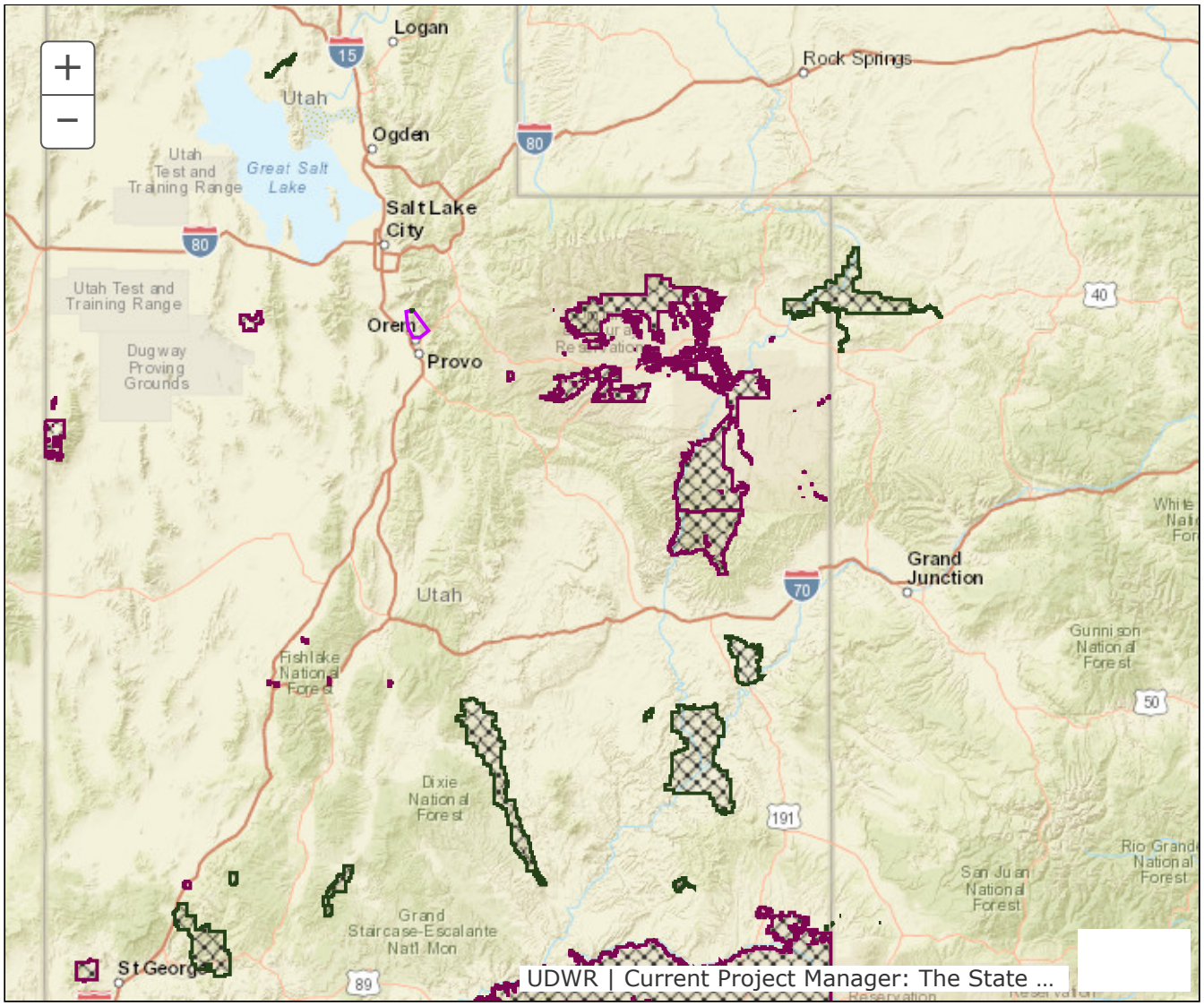
Updated Boundary: Salt Lake County—Boundary begins at the junction of I-15 and I-80 in Salt Lake City; east on I-80 to the Salt Lake-Summit county line; south along this county line to the Salt Lake-Wasatch county line; southwest along this county line to the Salt Lake-Utah county line; southwest along this county line to I-15; north on I-15 to I-80. USGS 1:100,000 Maps: Provo, Salt Lake City. Boundary questions? Call the Springville office, 801-491-5678.

Wildlife UTAH DIVISION OF WILDLIFE RESOURCES

BOUNDARY RECOMMENDATION

UNIT Wasatch Mtns, Timpanogos B

SPECIES Mountain goat



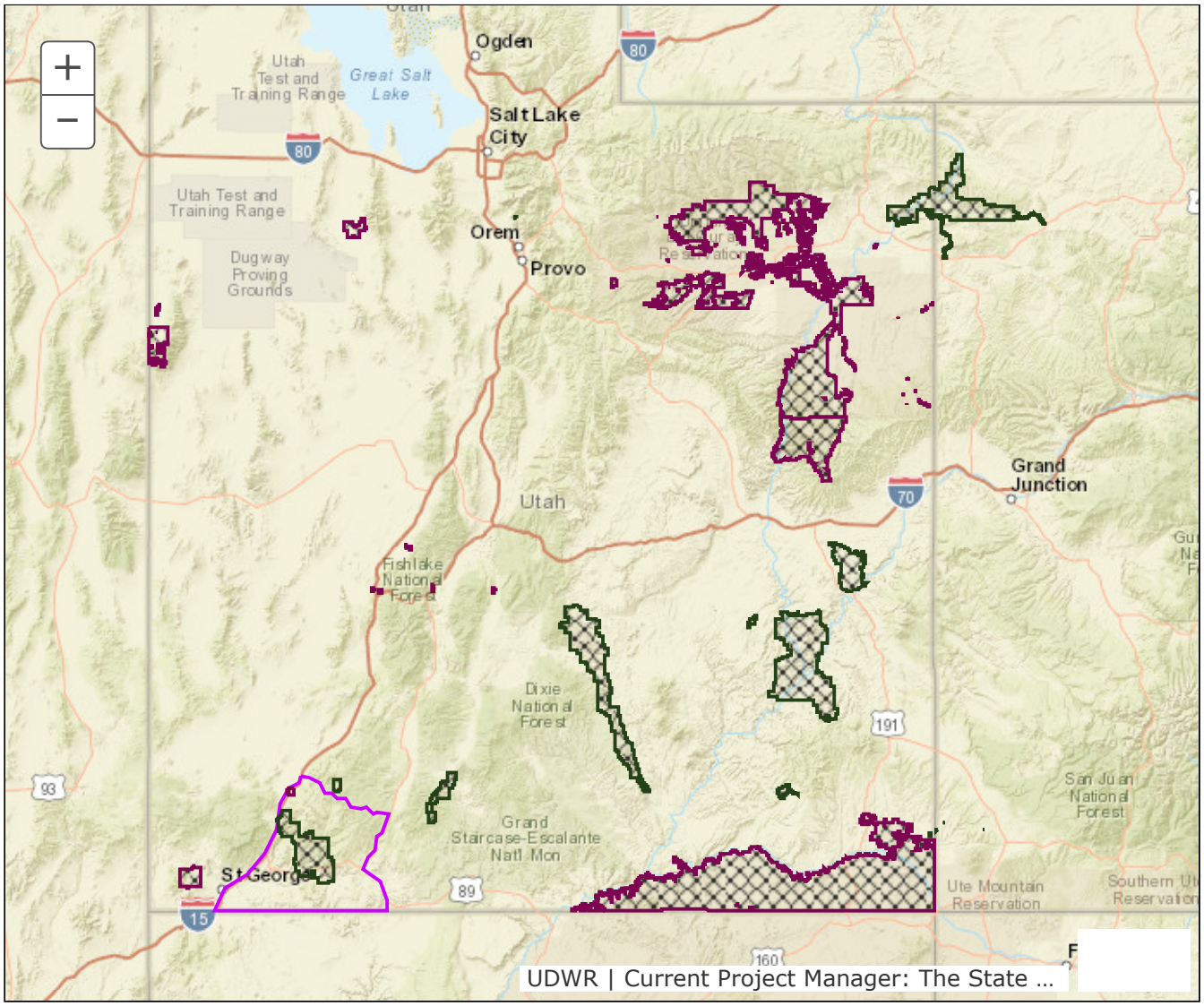
Updated Boundary: Utah County—Boundary begins at US-189 and 800 North in Orem; west on 800 North to US-89 (State Street); northwest on US-89 to SR-146; north on SR-146 to SR-92; east on SR-92 to Burned Canyon; south along this canyon bottom to the summit of Mount Timpanogos; south along this summit to Lost Creek; south along this creek to US-189; southwest on US-189 to 800 North in Orem. Excludes all CWMUs. USGS 1:100,000 Maps: Provo. Boundary questions? Call Springville office, 801-491-5678.

Wildlife UTAH DIVISION OF WILDLIFE RESOURCES

BOUNDARY RECOMMENDATION

UNIT Zion

SPECIES Deer



Updated Boundary: Iron, Kane and Washington counties—Boundary begins at the Utah-Arizona state line and I-15; north on I-15 to SR-14; east on SR-14 to US-89; south on US-89 to US-89A; south on US-89A to the Utah-Arizona state line; west on this state line to I-15. This hunt is comprised of all or largely private property. Excludes Zion National Park. EXCLUDES ALL NATIVE AMERICAN TRUST LANDS WITHIN THIS BOUNDARY. Excludes all CWMUs. USGS 1:100,000 Maps: Cedar City, Kanab, Panguitch, Saint George. Boundary questions? Call the Cedar City office, 435-865-6100.

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.

R657-5-2. Definitions.

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

(2) In addition:

(a) "Antlerless deer" means a deer without antlers or with antlers five inches or shorter.

(b) "Antlerless elk" means an elk without antlers or with antlers five inches or shorter.

(c) "Antlerless moose" means a moose with antlers shorter than its ears.

(d) "Arrow quiver" means a portable arrow case that completely encases all edges of the broadheads.

(e) "Buck deer" means a deer with antlers longer than five inches.

(f) "Buck pronghorn" means a pronghorn with horns longer than five inches.

(g) "Bull elk" means an elk with antlers longer than five inches.

(h) "Bull moose" means a moose with antlers longer than its ears.

(i) "Cow bison" means a female bison.

(j) "Doe pronghorn" means a pronghorn without horns or with horns five inches or shorter.

(k) “Draw-lock” means a mechanical device used to hold and support the draw weight of a conventional or compound bow at any increment of draw until released by the archer using a trigger mechanism and safety attached to the device.

(l) “Drone” means an autonomously controlled, aerial vehicle of any size or configuration that is capable of controlled flight without a human pilot aboard.

(m) “Ewe” means a female bighorn sheep or any bighorn sheep younger than one year of age.

(n) "Hunter's choice" means either sex may be taken.

([~~m~~]o) "Limited entry hunt" means any hunt published in the hunt tables of the guidebook of the Wildlife Board for taking big game, which is identified as limited entry and does not include general or once-in-a-lifetime hunts.

([~~n~~]p) "Limited entry permit" means any permit obtained for a limited entry hunt by any means, including conservation permits, wildlife expo permits, sportsman permits, cooperative wildlife management unit permits and limited entry landowner permits.

([~~o~~]q) "Once-in-a-lifetime hunt" means any hunt published in the hunt tables of the guidebook of the Wildlife Board for taking big game, which is identified as once-in-a-lifetime, and does not include general or limited entry hunts.

([~~p~~]r) "Once-in-a-lifetime permit" means any permit obtained for a once-in-a-lifetime hunt by any means, including conservation permits, wildlife expo permits,

sportsman permits, cooperative wildlife management unit permits and limited entry landowner permits.

([~~q~~]s) "Ram" means a male desert bighorn sheep or Rocky Mountain bighorn sheep older than one year of age.

([~~r~~]t) "Spike bull" means a bull elk which has at least one antler beam with no branching above the ears. Branched means a projection on an antler longer than one inch, measured from its base to its tip.

[~~(s) "Drone" means an autonomously controlled, aerial vehicle of any size or configuration that is capable of controlled flight without a human pilot aboard.~~]

R657-5-3. License, Permit, and Tag Requirements.

(1) A person may engage in hunting protected wildlife or in the sale, trade, or barter of protected wildlife or its parts in accordance with Section 23-19-1 and the rules or guidebooks of the Wildlife Board.

(2) Any license, permit, or tag that is mutilated or otherwise made illegible is invalid and may not be used for taking or possessing big game.

(3) A person must possess or obtain a Utah hunting or combination license to apply for or obtain any big game hunting permit.

R657-5-4. Age Requirements and Restrictions.

(1)(a) [~~Subject to the exceptions in subsection (c), a~~]A person 12 years of age or older may apply for or obtain a permit to hunt big game.

(b) A person 11 years of age may apply for a permit to hunt big game[~~if~~], provided that person's 12th birthday falls within the calendar year for which the permit is issued[~~.~~][~~(b) A~~] and that person [~~may~~]does not use [~~a~~]the permit to hunt big game before their 12th birthday.

(2)(a) A person at least 12 years of age and under 16 years of age must be accompanied by his parent or legal guardian, or other responsible person 21 years of age or older and approved by his parent or guardian, while hunting big game with any weapon.

(b) As used in this section, "accompanied" means at a distance within which visual and verbal communication are maintained for the purposes of advising and assisting.

R657-5-5. Duplicate License and Permit.

(1) Whenever any unexpired license, permit, tag or certificate of registration is destroyed, lost or stolen, a person may obtain a duplicate from a division office or online license agent, for ten dollars or half of the price of the original license, permit, or certificate of registration, whichever is less.

(2) The division may waive the fee for a duplicate unexpired license, permit, tag or certificate of registration provided the person did not receive the original license, permit, tag or certificate of registration.

R657-5-6. Hunting Hours.

Big game may be taken only between one-half hour before official sunrise through one-half hour after official sunset.

R657-5-7. Prohibited Weapons.

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

(2) A person may not use:

(a) a firearm capable of being fired fully automatic;

(b) any light enhancement device or aiming device that casts a visible beam of light; or

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

(3) Nothing in this Section shall be construed as prohibiting laser range finding devices or illuminated sight pins for archery equipment.

R657-5-8. Rifles[~~and~~], Shotguns, and Crossbows.

(1) [~~The following rifles and shotguns may be~~]A rifle used to [~~take~~]hunt big game[~~:~~][~~(a) any rifle firing~~] must fire centerfire cartridges and expanding bullets[~~; and~~].

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

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

R657-5-9. Handguns.

(1) A handgun may be used to take deer and pronghorn, provided the handgun:

(a) is a minimum of .24 caliber[~~,~~];

(b) fires a centerfire cartridge with an expanding bullet; and

(c) develops 500 foot-pounds of energy at the muzzle.

(2) A handgun may be used to take elk, moose, bison, bighorn sheep, and Rocky Mountain goat, provided the handgun;

(a) is a minimum of .24 caliber[~~,~~];

(b) fires a centerfire cartridge with an expanding bullet; and

(c) develops 500 foot-pounds of energy at 100 yards.

R657-5-10. Muzzleloaders.

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

(a) can be loaded only from the muzzle;

(b) has open sights, peep sights, or a variable or fixed power scope, including a magnifying scope;

(c) has a single barrel;

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

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

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

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

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

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

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

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

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

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

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

([~~b~~]c) The provisions of Subsection (a) do not apply to:

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

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

(iii) livestock owners protecting their livestock; or

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

(4) A person who has obtained an any weapon permit for a big game hunt may use muzzleloader equipment authorized in this Section to take the species authorized in the permit.

R657-5-11. Archery Equipment.

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

(a) the minimum bow pull is [~~40~~]30 pounds at the draw or the peak, whichever comes first; [~~and~~]

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

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

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

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

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

(b) arrows with chemically treated or explosive arrowheads;

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

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

(e) a bow with a magnifying aiming device.

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

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

(i) [~~use~~]only 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.

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

([~~b~~]c) The provisions of Subsection (a) do not apply to:

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

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

[~~(i) a minimum draw weight of 125 pounds;~~]

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

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

[~~(iv) a positive mechanical safety mechanism.~~]

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

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

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

[~~(c) It is unlawful for any person to:~~]

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

(i) [~~hunt big game with a crossbow during a big game archery hunt, except as provided in R657-12-8;~~]only use archery equipment authorized in Subsections (1) and (2) to take the species authorized in the permit; and

(ii) [~~carry a cocked crossbow containing an arrow or a bolt while in or on any motorized vehicle on a public highway or other public right-of-way, except as provided in R657-12-4; or~~] not possess or be in control of a crossbow, draw-lock, rifle, shotgun or muzzleloader while in the field during the archery-only season.

([~~iii) hunt any protected wildlife with a crossbow:~~]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.

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

[~~(B)~~]

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

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

R657-5-12. Areas With Special Restrictions.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

R657-5-13. Spotlighting.

(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.

(b) the use of a spotlight or other artificial light in a field, woodland, or forest where protected wildlife are generally found is [~~prima facie evidence~~]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 through 48 hours after any big game hunting season ends 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) 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 from improved airstrips, where there is no attempt or intent to locate protected wildlife.

R657-5-15. Party Hunting and Use of Dogs.

(1) A person may not take big game for another person, except as provided in Section 23-19-1 and Rule R657-12.

(2) A person may not use the aid of a dog to take, chase, harm or harass big game. The use of one blood-trailing dog controlled by leash during lawful hunting hours within 72 hours of shooting a big game animal is allowed to track wounded animals and aid in recovery.

R657-5-16. Big Game Contests.

A person may not enter or hold a big game contest that:

(1) is based on big game or its parts; and

(2) offers cash or prizes totaling more than $500.

R657-5-17. Tagging.

(1) The carcass of any species of big game must be tagged in accordance with Section 23-20-30.

(2) A person may not hunt or pursue big game after any of the notches have been removed from the tag or the tag has been detached from the permit.

(3) The tag must remain with the largest portion of the meat until the animal is entirely consumed.

R657-5-18. Transporting Big Game Within Utah.

(1) A person may transport big game within Utah only as follows:

(a) the head or sex organs must remain attached to the largest portion of the carcass;

(b) the antlers attached to the skull plate must be transported with the carcass of an elk taken in a spike bull unit; and

(c) the person who harvested the big game animal must accompany the carcass and must possess a valid permit corresponding to the tag attached to the carcass, except as provided in Subsection (2).

(2) A person who did not take the big game animal may transport it only after obtaining a shipping permit or disposal receipt from the division or a donation slip as provided in Section 23-20-9.

R657-5-19. Exporting Big Game From Utah.

(1) A person may export big game or its parts from Utah only if:

(a) the person who harvested the big game animal accompanies it and possesses a valid permit corresponding to the tag which must be attached to the largest portion of the carcass; or

(b) the person exporting the big game animal or its parts, if it is not the person who harvested the animal, has obtained a shipping permit from the division.

R657-5-20. Purchasing or Selling Big Game or its Parts.

(1) A person may only purchase, sell, offer or possess for sale, barter, exchange or trade any big game or its parts as follows:

(a) Antlers, heads and horns of legally taken big game may be purchased or sold only on the dates published in the guidebook of the Wildlife Board for taking big game;

(b) Untanned hides of legally taken big game may be purchased or sold only on the dates published in the guidebook of the Wildlife Board for taking big game;

(c) Inedible byproducts, excluding hides, antlers and horns of legally possessed big game as provided in Subsection 23-20-3, may be purchased or sold at any time;

(d) tanned hides of legally taken big game may be purchased or sold at any time; and

(e) shed antlers and horns may be purchased or sold at any time.

(2)(a) Protected wildlife that is obtained by the division by any means may be sold or donated at any time by the division or its agent.

(b) A person may purchase or receive protected wildlife from the division, which is sold or donated in accordance with Subsection (2)(a), at any time.

(3) A person selling or purchasing antlers, heads, horns or untanned hides shall keep transaction records stating:

(a) the name and address of the person who harvested the animal;

(b) the transaction date; and

(c) the permit number of the person who harvested the animal.

(4) Subsection (3) does not apply to scouting programs or other charitable organizations using untanned hides.

R657-5-21. Possession of Antlers and Horns.

(1) A person may possess antlers or horns or parts of antlers or horns only from:

(a) lawfully harvested big game;

(b) antlers or horns lawfully obtained as provided in Section R657-5-20; or

(c) shed antlers or shed horns.

(2)(a) A person may gather shed antlers or shed horns or parts of shed antlers or shed horns at any time. An authorization is required to gather shed antlers or shed horns or parts of shed antlers or shed horns during the shed antler and shed horn season published in the guidebook of the Wildlife Board for taking big game.

(b) A person must complete a wildlife harassment and habitat destruction prevention course annually to obtain the required authorization to gather shed antlers during the antler gathering season.

(3) "Shed antler" means an antler which:

(a) has been dropped naturally from a big game animal as part of its annual life cycle; and

(b) has a rounded base commonly known as the antler button or burr attached which signifies a natural life cycle process.

(4) "Shed horn" means the sheath from the horn of a pronghorn that has been dropped naturally as part of its annual life cycle. No other big game species shed their horns naturally.

R657-5-22. Poaching-Reported Reward Permits.

(1) For purposes of this section, "successful prosecution" means the screening, filing of charges and subsequent adjudication of guilt for the poaching incident.

(2) Any person who provides information leading to another person's successful prosecution under Section 23-20-4 for wanton destruction of a bull moose, desert bighorn ram, rocky mountain bighorn ram, rocky mountain goat, bison, bull elk, buck deer or buck pronghorn within any once-in-a-lifetime or limited entry area may receive a permit from the division to hunt the same species on the same once-in-a-lifetime or limited entry area where the violation occurred, except as provided in Subsection (3).

(3)(a) In the event that issuance of a poaching-reported reward permit would exceed 5% of the total number of limited entry or once-in-a-lifetime permits issued in the following year for the respective area, a permit shall not be issued for that respective area. As an alternative, the division may issue a permit as outlined in Subsections (b) or (c).

(b) If the illegally taken animal is a bull moose, desert bighorn ram, rocky mountain bighorn ram, rocky mountain goat or bison, a permit for an alternative species and an alternative once-in-a-lifetime or limited entry area that has been allocated more than 20 permits may be issued.

(c) If the illegally taken animal is a bull elk, buck deer or buck pronghorn, a permit for the same species on an alternative limited entry area that has been allocated more than 20 permits may be issued.

(4)(a) The division may issue only one poaching-reported reward permit for any one animal illegally taken.

(b) No more than one poaching-reported reward permit shall be issued to any one person per successful prosecution.

(c) No more than one poaching-reported reward permit per species shall be issued to any one person in any one calendar year.

(5)(a) Poaching-reported reward permits may only be issued to the person who provides the most pertinent information leading to a successful prosecution. Permits are not transferrable.

(b) If information is received from more than one person, the director of the division shall make a determination based on the facts of the case, as to which person provided the most pertinent information leading to the successful prosecution in the case.

(c) The person providing the most pertinent information shall qualify for the poaching-reported reward permit.

(6) Any person who receives a poaching-reported reward permit must possess or obtain a Utah hunting or combination license and otherwise be eligible to hunt and

obtain big game permits as provided in all rules and regulations of the Wildlife Board and the Wildlife Resources Code.

R657-5-23. General Archery Buck Deer Hunt.

(1) The dates of the general archery buck deer hunt are provided in the guidebook of the Wildlife Board for taking big game.

(2) A person who has obtained a general archery buck deer permit, or any other permit which allows that person to hunt general archery buck deer may use archery equipment prescribed in R657-5-11 to take:

(a) one buck deer within the general hunt area specified on the permit for the time specified in the guidebook of the Wildlife Board for taking big game; or

(b) a deer of hunter's choice within extended archery areas as provided in the guidebook of the Wildlife Board for taking big game.

(c) A person who has obtained a general archery buck deer permit, or any other permit which allows that person to hunt general archery buck deer, may not hunt within Cooperative Wildlife Management unit deer areas.

(d) A person who has obtained a general archery buck deer permit, or any other permit which allows that person to hunt general archery buck deer, may not hunt within premium limited entry deer or limited entry deer areas, except as provided by the Wildlife Board in the guidebooks for big game.

(3)(a) A person who obtains a general archery buck deer permit, or any other permit which allows that person to hunt general archery buck deer, may hunt within extended archery areas during the extended archery area seasons as provided in the guidebook of the Wildlife Board for taking big game and as provided in Subsection (b).

(b)(i) A person must complete the Archery Ethics Course annually to hunt any extended archery areas during the extended archery season.

(ii) A person must possess an Archery Ethics Course Certificate of Completion while hunting.

(4) A person who has obtained a general archery buck deer permit may not hunt during any other deer hunt or obtain any other deer permit, except antlerless deer and extended archery areas.

(5) If a person 17 years of age or younger obtains a general archery buck deer permit, that person may only hunt during the general archery deer season and the extended archery season as provided Section R657-5-23(3).

[~~(6) Hunter orange material must be worn if a centerfire rifle hunt is also in progress in the same area as provided in Section 23-20-31. Archers are cautioned to study rifle hunt tables and identify these areas described in the guidebook of the Wildlife Board for taking big game.~~]

R657-5-24. General Any Weapon Buck Deer Hunt.

(1) The dates for the general any weapon buck deer [~~hunt~~]hunts are provided in the guidebook of the Wildlife Board for taking big game.

(2) (a) A person who has obtained a general any weapon buck permit may use any legal weapon to take one buck deer within the hunt area and season dates specified on the permit as published in the guidebook of the Wildlife Board for taking big game.

(b) A person who has obtained a general any weapon buck deer permit, or any other permit which allows that person to hunt general any weapon buck deer, may not hunt within Cooperative Wildlife Management unit deer areas.

(c) A person who has obtained a general any weapon buck deer permit, or any other permit which allows that person to hunt general any weapon buck deer, may not hunt within premium limited entry deer and limited entry deer areas, except as provided by the Wildlife Board in the guidebooks for big game.

(3) A person who has obtained a general any weapon buck deer permit may not hunt during any other deer hunt or obtain any other deer permit, except:

(a) antlerless deer, as provided in R657-5-27; and

(b) any person 17 years of age or younger on July 31 of the current year, may hunt the general archery, extended archery, general any weapon and general muzzleloader buck deer seasons applicable to the unit specified on the general any weapon buck deer permit, using the appropriate equipment as provided in Sections R657-5-7 through R657-5-11, respectively.

R657-5-25. General Muzzleloader Buck Deer Hunt.

(1) The dates for the general muzzleloader buck deer hunt are provided in the guidebook of the Wildlife Board for taking big game.

(2) (a) A person who has obtained a general muzzleloader buck permit may use a muzzleloader, as prescribed in R657-5-10, to take one buck deer within the general hunt area specified on the permit as published in the guidebook of the Wildlife Board for taking big game.

(b) A person who has obtained a general muzzleloader buck deer permit, or any other permit which allows that person to hunt general muzzleloader buck deer, may not hunt within any deer Cooperative Wildlife Management unit.

(c) A person who has obtained a general muzzleloader buck deer permit, or any other permit which allows that person to hunt general muzzleloader buck deer, may not hunt within premium limited entry deer or limited entry deer areas, except as provided by the Wildlife Board in the guidebooks for big game.

(3)(a) A person who has obtained a general muzzleloader buck deer permit may not hunt during any other deer hunt or obtain any other deer permit, except antlerless deer, as provided in R657-5-27.

(b) If a person 17 years of age or younger purchases a general muzzleloader buck deer permit, that person may only hunt during the general muzzleloader deer season.

[~~(4) Hunter orange material must be worn if a centerfire rifle hunt is also in progress in the same area as provided in Section 23-20-31. Muzzleloader hunters are cautioned to study the rifle hunt tables to identify these areas described in the guidebooks of the Wildlife Board for taking big game.~~]

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(b) A person that obtains a premium limited entry or limited entry buck deer permit with a multi-season opportunity may hunt during any of the following limited entry buck deer seasons established in the guidebooks of the Wildlife Board for the unit specified on the premium limited entry or limited entry buck deer permit:

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

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

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

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

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

(a) areas closed to hunting;

(b) deer cooperative wildlife management units; and

(c) Indian tribal trust lands.

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

(a) did not take a buck deer during the premium limited entry or limited entry hunt;

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

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

(d) possesses on their person while hunting:

(i) the multi-season limited entry or limited entry buck deer permit; and

(ii) the Archery Ethics Course Certificate of Completion.

R657-5-27. Antlerless Deer Hunts.

(1)(a) To hunt antlerless deer, a hunter must obtain an antlerless deer permit.

(b) A person may obtain only one antlerless deer permit or a two-doe antlerless deer permit through the division's antlerless big game drawing.

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

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

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

(4)(a) A person who obtains an antlerless deer permit and any of the permits listed in Subsection (b) may use the antlerless deer permit during the established season for the antlerless deer permit and during the established season for the 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 deer during an archery season or hunt; and

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

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

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

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

(vi) Antlerless elk.

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

R657-5-28. General Archery Elk Hunt.

(1) The dates of the general archery elk hunt are provided in the guidebooks of the Wildlife Board for taking big game.

(2)(a) A person who has obtained a general archery elk permit may use archery equipment to take:

(i) an antlerless elk or a bull elk on a general any bull elk unit, excluding elk cooperative wildlife management units;

(ii) an antlerless elk or a spike bull elk on a general spike bull elk unit, excluding elk cooperative wildlife management units;

(iii) an antlerless elk or a bull elk on extended archery areas as provided in the guidebook of the Wildlife Board for taking big game.

(3)(a) A person who obtains a general archery elk permit may hunt within the extended archery areas during the extended archery area seasons as provided in the guidebook of the Wildlife Board for taking big game and as provided in Subsection (b).

(b)(i) A person must complete the Archery Ethics Course annually to hunt the extended archery areas during the extended archery season.

(ii) A person must possess an Archery Ethics Course Certificate of Completion on their person while hunting.

(4) A person who has obtained an archery elk permit may not hunt during any other elk hunt or obtain any other elk permit, except as provided in Subsection R657-5-33(3) and by the guidebooks of the Wildlife Board for taking big game.

[~~(5) Hunter orange material must be worn if a centerfire rifle hunt is also in progress in the same area as provided in Section 23-20-31. Archers are cautioned to study the rifle hunt tables to identify these areas described in the guidebook of the Wildlife Board for taking big game.~~]

R657-5-29. General Season Bull Elk Hunt.

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

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

(b) elk cooperative wildlife management units.

(2)(a) A person may purchase either a spike bull elk permit or an any bull elk permit.

(b) A person who has obtained a general season spike bull elk permit may take a spike bull elk on a general season spike bull elk unit. Any bull elk units are closed to spike bull elk permittees.

(c) A person who has obtained a general season any bull elk permit may take any bull elk, including a spike bull elk, on a general season any bull elk unit. Spike bull elk units are closed to any bull elk permittees.

(3) A person who has obtained a general season bull elk permit may use any legal weapon to take a spike bull elk or any bull elk, as specified on the permit.

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

(5) The Wildlife Board may establish multi-season hunting opportunities in the big game guidebooks for general season spike and bull elk hunts consistent with the following parameters:

(a) an individual with a multi-season spike elk permit may use:

(i) archery equipment as prescribed in R657-5-11 to take an antlerless elk or spike bull elk on a general season spike unit during the archery season;

(ii) archery equipment as prescribed in R657-5-11 to take an antlerless elk or any bull elk on a general season any bull unit during the archery season;

(iii) muzzleloader equipment as prescribed in R657-5-10 to take spike bull elk on general season spike units during the muzzleloader season; or

(iv) any legal weapon as prescribed in R657-5 to take a spike bull elk on a general season spike unit during the any legal weapon season.

(b) An individual with a multi-season any bull elk permit may use:

(i) archery equipment as prescribed in R657-5-11 to take an antlerless elk or spike elk on a general season spike unit during the archery season;

(ii) archery equipment as prescribed in R657-5-11 to take an antlerless elk or any bull elk on a general season any bull unit during the archery season;

(iii) muzzleloader equipment as prescribed in R657-5-10 to take any bull elk on general season any bull units during the muzzleloader season; or

(iv) any legal weapon as prescribed in R657-5 to take any bull elk on a general season any bull unit during the any legal weapon season.

(c) An individual who obtains a multi-season bull elk permit may hunt within the extended archery areas during the extended archery area seasons described in the guidebook of the Wildlife Board for taking big game, provided that individual:

(i) completes the Archery Ethics Course prior to going afield; and

(ii) possesses the Archery Ethics Course Certificate of Completion on their person while hunting.

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

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

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

(b) elk cooperative wildlife management units.

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

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

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

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

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

R657-5-31. Youth General Any Bull Elk Hunt.

(1)(a) For purposes of this section "youth" means any person 17 years of age or younger on July 31 of the current year.

(b) A youth may apply for or obtain a youth any bull elk permit.

(c) A qualified person may obtain a youth any bull elk permit only once during their life.

(2) The youth any bull elk hunting season and areas are published in the guidebook of the Wildlife Board for taking big game.

(3)(a) A youth who has obtained a youth general any bull elk permit may take any bull elk, including antlerless elk, on a general any bull elk unit. Spike bull elk units are closed to youth general any bull elk permittees.

(b) A youth who has obtained a youth general any bull elk permit may use any legal weapon to take any bull elk or antlerless elk as specified on the permit.

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

(5) Preference points shall not be awarded or utilized when applying for or obtaining a youth general any bull elk permit.

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 or draw-lock;

(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 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 usingthe 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[~~-or~~], any legal weapon, or dedicated hunter;

(ii) General bull elk for archery, muzzleloader[~~-or~~], 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.

R657-5-34. Buck Pronghorn Hunts.

(1) To hunt buck pronghorn, a hunter must obtain a buck pronghorn permit.

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

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

(b) Limited entry and cooperative wildlife management unit buck pronghorn 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).

(4) A buck pronghorn permit allows a person to take one buck pronghorn within the area, during the season, and using the weapon type specified on the permit, except on a pronghorn cooperative wildlife management unit located within a limited entry unit.

R657-5-35. Doe Pronghorn Hunts.

(1)(a) To hunt doe pronghorn, a hunter must obtain a doe pronghorn permit.

(b) A person may obtain only one doe pronghorn permit or a two-doe pronghorn permit through the division's antlerless big game drawing.

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

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

(c) A person may not hunt doe pronghorn on any pronghorn cooperative wildlife management unit unless that person obtains an antlerless pronghorn permit for that specific cooperative wildlife management unit.

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

R657-5-36. Antlerless Moose Hunts.

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

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

(b) A person may not hunt antlerless moose on a moose cooperative wildlife management unit unless that person obtains an antlerless moose permit for that specific cooperative wildlife management unit as specified on the permit.

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

R657-5-37. Bull Moose Hunts.

(1) To hunt bull moose, a hunter must obtain a bull moose permit.

(2) A person who has obtained a bull moose permit may not obtain any other moose permit or hunt during any other moose hunt.

(3) A bull moose permit allows a person[~~using any legal weapon~~] to take one bull moose within the area[~~and season specified on the permit,~~], during the seasons, and using the weapon type prescribed by the Wildlife Board, excluding any moose cooperative wildlife management unit located within a limited entry unit.

(4)(a) A person who has obtained a bull moose 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 moose.

(b) Bull moose 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).

R657-5-38. Bison Hunts.

(1) To hunt bison, a hunter must obtain a bison permit.

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

(3) [~~The~~]A hunter's choice bison permit allows a person [~~using any legal weapon~~]to take a bison of either sex within the area[~~ and season as specified on the permit~~], during the seasons, and using the weapon type prescribed by the Wildlife Board.

(4)(a) An orientation course is required for bison hunters who draw an Antelope Island bison permit. Hunters shall be notified of the orientation date, time and location.

(b) The Antelope Island hunt is administered by the Division of Parks and Recreation.

(5) A cow bison permit allows a person to take one cow bison [~~using any legal weapon~~]within the area[~~ and season~~], during the seasons, and using the weapon types as specified on the permit and in the Antlerless guidebook of the Wildlife Board for taking big game.

(6) An orientation course is required for bison hunters who draw cow bison permits. Hunters will be notified of the orientation date, time and location.

(7)(a) A person who has obtained a bison 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 bison.

(b) Bison 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).

R657-5-39. Desert Bighorn and Rocky Mountain Bighorn Sheep Ram Hunts.

(1) To hunt a ram desert bighorn sheep or a ram Rocky Mountain bighorn sheep, a hunter must obtain the respective permit.

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

(3) [~~Desert~~]Ram desert bighorn sheep and ram Rocky Mountain [~~big horn~~]bighorn sheep permits are considered separate once-in-a-lifetime hunting opportunities.

(4)(a) [~~The~~]A ram desert bighorn sheep permit allows a person [~~using any legal weapon~~]to take one desert bighorn ram within the area[~~ and season specified on the~~

~~permit~~], during the seasons, and using the weapon type prescribed by the Wildlife Board.

(b) [~~The~~]A ram Rocky Mountain sheep permit allows a person [~~using any legal weapon~~]to take one Rocky Mountain bighorn ram within the area[~~ and season specified on the permit~~], during the seasons, and using the weapon type prescribed by the Wildlife Board.

[~~(5) The permittee may attend a hunter orientation course. The division provides each permittee with the time and location of the course.~~]

[~~(6) All bighorn sheep hunters are encouraged to have a spotting scope with a minimum of 15 power while hunting bighorn sheep. Any ram may be legally taken, however, permittees are encouraged to take a mature ram. The terrain inhabited by bighorn sheep is extremely rugged, making this hunt extremely strenuous.~~]

[~~(7) ~~]5Successful hunters must deliver the horns of the bighorn sheep to a division office within 72 hours of leaving the hunting area. A numbered seal will be permanently affixed to the horn indicating legal harvest.

([~~8~~]6)(a) A person who has obtained a desert bighorn sheep or Rocky Mountain bighorn sheep 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 desert bighorn sheep or Rocky Mountain bighorn sheep.

(b) Desert bighorn sheep or Rocky Mountain bighorn sheep 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).

R657-5-39.5. Desert Bighorn and Rocky Mountain Bighorn Ewe Hunts.

(1) To hunt a ewe desert bighorn sheep or a ewe Rocky Mountain bighorn sheep, a hunter must obtain the respective ewe permit.

(2)(a) A ewe permit allows a person to take one ewe using any legal weapon within the area and season specified on the permit and in the Antlerless guidebook of the Wildlife Board for taking big game.

(3) A person who has obtained a ewe permit may not hunt desert bighorn or Rocky Mountain bighorn sheep during any other sheep hunt or obtain any other sheep permit during that hunt year.

(4) Ewe desert bighorn sheep and ewe Rocky Mountain bighorn sheep permits are considered separate hunting opportunities.

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. [~~Permittees are encouraged to take a mature goat. A mature goat is a goat older than two years of age, as determined by counting the annual rings on the horn.~~]

(4) The goat permit allows a person [~~using any legal weapon~~]to take one goat within the area[~~ and season specified on the permit~~], during the seasons, and using the weapon type prescribed by the Wildlife Board.

(5) [~~All goat hunters are encouraged to have a spotting scope with a minimum of 15 power while hunting goats. The terrain inhabited by Rocky Mountain goat is extremely rugged making this hunt extremely strenuous. The goat's pelage may be higher quality later in the hunting season.~~][~~(6) ~~]A female-only goat[~~ only~~] permit allows a person to take one [~~female goat using any legal weapon~~]femalegoat within the area, during the seasons, and [~~season~~]using the weapon type specified on the permit and in the Antlerless guidebook of the Wildlife Board for taking big game.

([~~7~~]6) An orientation course is required for Rocky Mountain goat hunters who draw female-goat only permits. Hunters will be notified of the orientation date, time and location.

([~~8~~]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).

R657-5-41. Depredation Hunter Pool Permits.

(1) When big game are causing damage or are considered a nuisance, control hunts not listed in the guidebook of the Wildlife Board for taking big game may be held as provided in Rule R657-44. These hunts occur on short notice, involve small areas, and are limited to only a few hunters.

(2) For the purpose of this section, nuisance is defined as a situation where big game animals are found to have moved off formally approved management units onto adjacent units or other areas not approved for that species.

R657-5-42. Carcass Importation.

(1) It is unlawful to import dead elk, moose, mule deer, or white-tailed deer or their parts from the areas of any state, province, game management unit, equivalent wildlife management unit, or county, which has deer or elk diagnosed with Chronic Wasting Disease, except the following portions of the carcass:

(a) meat that is cut and wrapped either commercially or privately;

(b) quarters or other portion of meat with no part of the spinal column or head attached;

(c) meat that is boned out;

(d) hides with no heads attached;

(e) skull plates with antlers attached that have been cleaned of all meat and tissue;

(f) antlers with no meat or tissue attached;

(g) upper canine teeth, also known as buglers, whistlers, or ivories; or

(h) finished taxidermy heads.

(2)(a) The affected states, provinces, game management units, equivalent wildlife management units, or counties, which have deer, elk, or moose diagnosed with Chronic Wasting Disease shall be available at division offices and through the division's Internet address.

(b) Importation of harvested elk, moose, mule deer, or white-tailed deer or its parts from the affected areas are hereby restricted pursuant to Subsection (1).

(3) Nonresidents of Utah transporting harvested elk, moose, mule deer, or white-tailed deer from the affected areas are exempt if they:

(a) do not leave any part of the harvested animal in Utah and do not stay more than 24 hours in the state of Utah;

(b) do not have their deer, elk, or moose processed in Utah; or

(c) do not leave any parts of the carcass in Utah.

R657-5-43. Chronic Wasting Disease - Infected Animals.

(1) Any person who under the authority of a permit issued by the division legally takes a deer, elk, or moose that is later confirmed to be infected with Chronic Wasting Disease may:

(a) retain the entire carcass of the animal;

(b) retain any parts of the carcass, including antlers, and surrender the remainder to the division for proper disposal; or

(c) surrender all portions of the carcass in their actual or constructive possession, including antlers, to the division and receive a free new permit the following year for the same hunt.

(2) The new permit issued pursuant to Subsection (1)(c) shall be for the same species, sex, weapon type, unit, region, and otherwise subject to all the restrictions and conditions imposed on the original permit, except season dates for the permit shall follow the guidebook of the Wildlife Board for taking big game published in the year the new permit is valid.

(3) Notwithstanding other rules to the contrary, private landowners and landowner associations may refuse access to private property to persons possessing new permits issued under Subsection (1)(c).

R657-5-44. Management Bull Elk Hunt.

(1)(a) For the purposes of this section "management bull" means any bull elk with 5 points or less on at least one antler. A point means a projection longer than one inch, measured from its base to its tip.

(b) For purposes of this section "youth" means any person 17 years of age or younger on July 31.

(c) For the purposes of this section “senior” means any person 65 years of age or older on the opening day of the management bull elk archery season published in the guidebook of the Wildlife Board for taking big game.

(2)(a) Management bull elk permits shall be distributed pursuant to R657-62 with thirty percent of the permits being allocated to youth, thirty percent to seniors and the remaining forty percent to hunters of all ages.

(3) Management bull elk permit holders may take one management bull elk during the season, on the area and with the weapon type specified on the permit. Management bull elk hunting seasons, areas and weapon types are published in the guidebook of the Wildlife Board for taking big game.

(4)(a) A person who has obtained a management 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 management bull elk.

(b) Management bull elk permit holders must report hunt information by telephone, or through the division's Internet address.

(5)(a) Management bull elk permit holders who successfully harvest a management bull elk, as defined in Subsection (1)(a) must have their animal inspected by the division.

(b) Successful hunters must deliver the head and antlers of the elk they harvest to a division office for inspection within 48 hours after the date of kill.

(6) Management bull elk permit holders may not retain possession of any harvested bull elk that fails to satisfy the definition requirements in Subsection (1)(a).

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

R657-5-45. General Any Weapon Buck Deer and Bull Elk Combination Hunt.

(1) Permit numbers, season dates and unit boundary descriptions for the general any weapon buck deer and bull elk combination hunt shall be established in the guidebook of the Wildlife Board for taking big game.

(2) A person who obtains a general any weapon buck deer and bull elk combination permit may use any legal weapon to take one buck deer and one bull elk during the season and within the unit specified on the permit.

(a) A general any weapon buck deer and bull elk combination permit does not authorize the holder to hunt deer or elk within any cooperative wildlife management unit.

(3) A person who has obtained a general any weapon buck deer and bull elk combination permit may not hunt during any other deer or elk hunt or obtain any other deer or elk permit, except:

(a) antlerless deer, as provided in Subsection R657-5-27, and

(b) antlerless elk, as provided in Subsection R657-5-33.

(4)(a) Lifetime license holders may obtain a general any weapon buck deer and bull elk combination permit.

(b) Upon obtaining a general any weapon buck deer and bull elk combination permit, the lifetime license holder foregoes any rights to receive a buck deer permit for the general archery, general any weapon or general muzzleloader deer hunts as provided in Section 23-19-17.5.

(c) A refund or credit is not issued for the general archery, general any weapon or general muzzleloader deer permit.

R657-5-46. Management Buck Deer Hunt.

(1)(a) For the purposes of this section “management buck” means any buck deer with 3 points or less on at least one antler above and including the first fork in the antler. A point means a projection longer than one inch, measured from its base to its tip. The eye guard is not counted as a point.

(b) For purposes of this section "youth" means any person 17 years of age or younger on July 31.

(c) For the purposes of this section “senior” means any person 65 years of age or older on the opening day of the management buck deer archery season published in the guidebook of the Wildlife Board for taking big game.

(2) Management buck deer permits shall be distributed pursuant to rule R657-62 with thirty percent of the permits being allocated to youth, thirty percent to seniors and the remaining forty percent to hunters of all ages.

(3) Management buck deer permit holders may take one management buck deer during the season, [~~on~~]in the area and with the weapon type specified on the permit. Management buck deer hunting seasons, areas and weapon types are published in the guidebook of the Wildlife Board for taking big game.

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

(b) Management buck deer permit holders must report hunt information by telephone, or through the division's Internet address.

(5)(a) Management buck deer permit holders who successfully harvest a management buck deer, as defined in Subsection (1)(a) must have their animal inspected by the division.

(b) Successful hunters must deliver the head and antlers of the deer they harvest to a division office for inspection within 48 hours after the date of kill.

(6) Management buck deer permit holders may not retain possession of any harvested buck deer that fails to satisfy the definition requirements in Subsection (1)(a).

(7) A person who has obtained a management buck deer permit may not hunt during any other deer hunt or obtain any other deer permit, except as provided in Section R657-5-[~~28(4).~~]27.

R657-5-47. Cactus Buck Deer Hunt

(1) For the purposes of this section “cactus buck” means a buck deer with any velvet covering the antlers during the season dates established by the Wildlife Board for a cactus buck deer hunt.

(2)(a) Cactus buck deer permit holders may take one cactus buck deer during the season, in the area, and with the weapon type specified on the permit.

(b) Cactus buck deer hunting seasons, areas and weapon types are published in the guidebooks of the Wildlife Board for taking big game.

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

(b) Cactus buck deer permit holders must report hunt information by telephone, or through the division's Internet address.

(4)(a) Cactus buck deer permit holders who successfully harvest a cactus buck deer, as defined in Subsection (1)(a), must have their animal inspected by the division.

(b) Successful hunters must deliver the head and antlers of the deer they harvest to a division office for inspection within 48 hours after the date of harvest.

(5) Cactus buck deer permit holders may not retain possession of any harvested buck deer that fails to satisfy the definition requirements in Subsection (1).

(6) A person who has obtained a cactus buck deer permit may not hunt during any other deer hunt or obtain any other deer permit, except as provided in Section R657-5-27.

R657-5-48. Hunter Orange Exceptions.

(1) A person shall wear a minimum of 400 inches of hunter orange material on the head, chest, and back while hunting any species of big game, with the following exceptions:

(a) Hunters participating in a once-in-a-lifetime, statewide conservation, or statewide sportsmen hunt;

(b) Hunters participating in an archery or muzzleloader hunt outside of an area where an any weapon general season bull elk or any weapon general season buck deer hunt is occurring;

(c) Hunters hunting on a cooperative wildlife management unit unless otherwise required by the operator of the cooperative wildlife management units; and

(d) Hunters participating in a nuisance wildlife removal hunt authorized under a certificate of registration by the division.

KEY: wildlife, game laws, big game seasons
Date of Enactment or Last Substantive Amendment: July 11, 2016
Notice of Continuation: October 5, 2015
Authorizing, and Implemented or Interpreted Law: 23-14-18; 23-14-19; 23-16-5; 23-16-6

R657. Natural Resources, Wildlife Resources.
R657-62. Drawing Application Procedures.
R657-62-1. Purpose and Authority.

(1) Under authority of Sections 23-14-18 and 23-14-19, the Wildlife Board has established this rule for drawing applications and procedures.

(2) Specific season dates, bag and possession limits, areas open, number of permits and other administrative details that may change annually are published in the respective guidebooks of the Wildlife Board.

R657-62-2. Definitions.

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

(2) In addition:

(a)“Application” means a form required by the Division which must be completed by a person and submitted to the Division in order to apply for a hunting permit.

(b) "Landowner" means any individual, family or corporation who owns property in Utah and whose name appears on the deed as the owner of eligible property or whose name appears as the purchaser on an executed contract for sale of eligible property.

(c) "Limited entry hunt" means any hunt listed in the hunt tables published by the Wildlife Board and is identified as a premium limited entry hunt or limited entry hunt. “Limited entry hunt” does not include cougar pursuit or bear pursuit.

(d) "Limited entry permit" means any permit obtained for a limited entry hunt, including conservation permits, expo permits and sportsman permits.

(e)(i) "Valid application" means an application:

(A) for a permit to take a species for which the applicant is eligible to possess;

(B) for a permit to take a species regardless of estimated permit numbers;

(C) for a certificate of registration; and

(D) containing sufficient information, as determined by the division, to process the application, including personal information, hunt information, and sufficient payment.

(ii) Applications missing any of the items in Subsection (i) may be considered valid if the application is timely corrected through the application correction process.

(f)"Waiting period" means a specified period of time that a person who has obtained a permit must wait before applying for the same permit type.

(g) “Once-in-a-lifetime hunt” means any hunt listed in the hunt tables published by the Wildlife Board and is identified as once-in-a-lifetime, and does not include general or limited entry hunts.

(h) “Once-in-a-lifetime permit” means any permit obtained for a once-in-a-lifetime hunt by any means, including conservation permits, sportsman permits, cooperative wildlife management unit permits and limited entry landowner permits.

R657-62-3. Scope of Rule.

(1) This rule sets forth the procedures and requirements for completing and filing applications to receive the following hunting permits and/or certificates of registrations:

(a) Dedicated Hunter certificate of registrations;

(b) limited-entry deer;

(c) limited-entry elk;

(d) limited-entry pronghorn;

(e) once-in-a-lifetime;

(f) public cooperative wildlife management unit;

(g) general season deer and youth elk;
(h) limited entry bear;
(i) bear pursuit;
(j) antlerless big game;
(k) sandhill crane;
(l) sharp-tail and greater sage grouse;
(m) swan
(n) cougar;
(o) sportsman; and
(p) turkey.

R657-62- 4. Residency Restrictions.

(1) Only a resident may apply for or obtain a resident permit or resident certificate of registration and only a nonresident may apply for or obtain a nonresident permit or nonresident certificate of registration.

(2)(a) To apply for a resident permit or certificate of registration, a person must be a resident at the time of purchase.

(b) The posting date of the drawing shall be considered the purchase date of a permit or certificate of registration issued through a drawing.

R657-62- 5. Hunting on Private Lands

(1) Any person who applies for a hunt that occurs on private land is responsible for obtaining written permission from the landowner to access the property. The division does not guarantee access and cannot restore lost opportunity, bonus points, or permit fees when access is denied. Hunters should contact private landowners for permission to access their land prior to applying for a permit. The Division does not have the names of landowners where hunts occur.

R657-62- 6. Applications.

(1)(a) Applications are available at the division's internet address, and must be completed and submitted online by the date prescribed in the respective guidebook of the Wildlife Board.

(b) The permit fees and handling fees must be paid with a valid debit or credit card.

(c) Any license, permit or certificate of registration issued to a person is invalid where full payment is not remitted to and received by the division.

(d) A person who applies for or obtains a permit or certificate of registration must notify the division of any change in mailing address, residency, telephone number, email address, and physical description.

R657-62-7. Group Applications.

(1) When applying as a group all applicants in the group with valid applications and who are eligible to possess the permit or certificate of registration applied for shall receive a permit or certificate of registration where the group is successful in the drawing.

(2) Group members must apply for the same hunt choices.

(3) When applying as a group, if the available permit or certificate of registration quota is not large enough to accommodate the group size, the group application will not be considered.

R657-62-8. Bonus Points.

(1) Bonus points are used to improve odds for drawing permits.

(2)(a) A bonus point is awarded for:

(i) each valid unsuccessful application when applying for limited-entry permits; or

(ii) each valid application when applying for bonus points.

(b) Bonus points are awarded by species for;

(i) limited-entry deer including cooperative wildlife management unit buck deer and management buck deer;

(ii) limited-entry elk including cooperative wildlife management unit bull elk and management bull elk;

(iii) limited-entry pronghorn including cooperative wildlife management unit buck pronghorn;

(iv) once-in-a-lifetime species including cooperative wildlife management units;

(v) limited entry bear;

(vi) antlerless moose;

(vii) ewe Rocky Mountain bighorn sheep;

(viii) ewe desert bighorn sheep;

(ix) cougar; and

([~~viii~~]x) turkey.

(3)(a) A person may not apply in the drawing for both a permit and a bonus point for the same species.

(b) A person may not apply for a bonus point if that person is ineligible to apply for a permit for the respective species.

(c) Group applications will not be accepted when applying for bonus points.

(d) A person may apply for bonus points only during the applicable drawing application for each species.

(4)(a) Fifty percent of the permits for each hunt unit will be reserved for applicants with the greatest number of bonus points.

(b) Based on the applicant's first choice, the reserved permits will be designated by a random drawing number to eligible applicants with the greatest number of bonus points for each species.

(c) If reserved permits remain, the reserved permits will be designated by a random number to eligible applicants with the next greatest number of bonus points for each species.

(d) The procedure in Subsection (c) will continue until all reserved permits are issued or no applications for that species remain.

(e) Any reserved permits remaining and any applicants who are not selected for reserved permits will be returned to the applicable drawing.

(5)(a) Each applicant receives a random drawing number for:

(i) each species applied for; and

(ii) each bonus point for that species.

(6) Bonus points are forfeited if a person obtains a permit through the drawing for that bonus point species including any permit obtained after the drawing.

(7) Bonus points are not forfeited if:

(a) a person is successful in obtaining a conservation permit, expo permit, sportsman permit, or harvest objective bear permit;

(b) a person obtains a landowner or a cooperative wildlife management unit permit from a landowner; or

(c) a person obtains a poaching-reported reward permit.

(8) Bonus points are not transferable.

(9) Bonus points are averaged and rounded down when two or more applicants apply together on a group application.

(10)(a) Bonus points are tracked using social security numbers or division-issued customer identification numbers.

(b) The division shall retain electronic copies of applications from 1996 to the current drawings for the purpose of researching bonus point records.

(c) Any requests for researching an applicant's bonus point records must be submitted within the time frames provided in Subsection (b).

(d) Any bonus points on the division's records shall not be researched beyond the time frames provided in Subsection (b).

(e) The division may void or otherwise eliminate any bonus point obtained by fraud, deceit, misrepresentation, or in violation of law.

R657-62-9. Preference Points.

(1) Preference points are used in the applicable drawings to ensure that applicants who are unsuccessful in the drawing will have first preference in the next year’s drawing.

(2)(a) A preference point is awarded for:

(i) each valid, unsuccessful application applying for a general buck deer, antlerless deer, antlerless elk, doe pronghorn, Sandhill Crane, Sharp-tailed grouse, Greater sage grouse or Swan permit; or

(ii) each valid application when applying only for a preference point in the applicable drawings.

(b) Preference points are awarded by species for:

(i) general buck deer;

(ii) antlerless deer;

(iii) antlerless elk;

(iv) doe pronghorn;

(v) Sandhill Crane;

(vi) Sharp-tailed Grouse;

(vii) Greater sage grouse; and

(viii) Swan.

(3)(a) A person may not apply in the drawing for both a preference point and a permit for the species listed in (2)(b).

(b) A person may not apply for a preference point if that person is ineligible to apply for a permit.

(c) Preference points shall not be used when obtaining remaining permits.

(4) Preference points for the applicable species are forfeited if a person obtains a general buck deer, antlerless deer, antlerless elk, doe pronghorn, Sandhill Crane, Sharp-tailed grouse, Greater sage grouse or Swan permit through the drawing.

(5) Preference points are not transferable.

(6) Preference points are averaged and rounded down when two or more applicants apply together on a group application.

(7)(a) Preference points are tracked using social security numbers or division-issued customer identification numbers.

(b) The division shall retain copies of electronic applications from 2000 to the current applicable drawings for the purpose of researching preference point records.

(c) Any requests for researching an applicant's preference point records must be submitted within the time frames provided in Subsection (b).

(d) Any preference points on the division's records shall not be researched beyond the time frames provided in Subsection (b).

(e) The division may eliminate any preference point obtained by fraud, deceit, misrepresentation, or in violation of law.

R657-62-10. Dedicated Hunter Preference Points.

(1) Preference points are used in the dedicated hunter certificate of registration drawing to ensure that applicants who are unsuccessful in the drawing will have first preference in the next year's drawing.

(2) A preference point is awarded for:

(a) each valid unsuccessful application;

(b) each valid application when applying only for a preference point in the dedicated hunter drawing.

(3)(a) A person may not apply in the drawing for both a preference point and a certificate of registration.

(b) A person may not apply for a preference point if that person is ineligible to apply for a certificate of registration.

(4) Preference points are forfeited if a person obtains a certificate of registration through the drawing.

(5)(a) Preference points are not transferable.

(b) Preference points shall only be applied to the Dedicated Hunter drawing.

(6) Preference points are averaged and rounded down to the nearest whole point when two or more applicants apply together on a group application.

(7)(a) Preference points are tracked using social security numbers or division-issued customer identification numbers.

(b) The division shall retain copies of electronic applications from 2011 to the current applicable drawing for the purpose of researching preference point records.

(c) Any requests for researching an applicant's preference point records must be requested within the time frames provided in Subsection (b).

(d) Any preference points on the division's records shall not be researched beyond the time frames provided in Subsection (b).

(e) The division may eliminate any preference points earned that are obtained by fraud, deceit or misrepresentation.

R657-62-11. Corrections, Withdrawals and Resubmitting Applications.

(1) (a) If an error is found on the application, the applicant may be contacted for correction.

(b) The division reserves the right to correct or reject applications.

(2)(a) An applicant may withdraw their application from the permit or certificate of registration drawing by the date published in the respective guidebook of the Wildlife Board.

(b) An applicant may resubmit their application, after withdrawing a previous application, for the permit or certificate of registration drawing by the date published in the respective guidebook of the Wildlife Board.

(c) Handling fees, hunting or combination license fees and donations will not be refunded. Resubmitted applications will incur a handling fee.

(3) To withdraw an entire group application, all applicants must withdraw their individual applications.

R657-62-12. Drawing Results.

Drawing results will be made available by the date prescribed in the respective guidebook of the Wildlife Board.

R657-62-13. License, permit, certificate of registration and handling fees.

(1) Unsuccessful applicants will not be charged for a permit or certificate of registration.

(2) The handling fees and hunting or combination license fees are nonrefundable.

(3) All license, permit, certificate of registration and handling fees must be paid with a valid debit or credit card.

R657-62-14. Permits Remaining after the Drawing.

(1) Any permits remaining after the drawing are available on the date published in the respective guidebook of the Wildlife Board on a first-come, first-served basis from division offices, participating license agents and through the division's internet site.

R657-62-15. Waiting Periods for permits obtained after the drawing.

(1) Waiting periods do not apply to the purchase of remaining permits sold over the counter except as provided in Section 2.

(2) Waiting periods are incurred as a result of purchasing remaining permits after the drawing. If a remaining permit is purchased in the current year, waiting periods will be in effect when applying in the drawing in following years.

R657-62-16. Dedicated Hunter Certificates of Registration.

(1) (a) Applicants for a dedicated hunter certificate of registration must meet all age requirements, proof of hunter education requirements and youth restrictions as provided in rule R657-38.

(b) Each prospective participant must complete Dedicated Hunter program orientation course annually before submitting an application.

(2) Group applications are accepted. Up to four applicants may apply as a group.

R657-62-17. Lifetime License Permits.

(1) Lifetime License permits shall be issued pursuant to rule R657-17.

R657-62-18. Big Game.

(1) Permit Applications

(a) Limited entry, Cooperative Wildlife Management Unit, Once-in-a-Lifetime, Management Bull Elk, Management Buck Deer, General Buck Deer, and Youth General Any Bull Elk permit applications.

(i) A person must possess or obtain a valid hunting or combination license to apply for or obtain a big game permit.

(ii) Applicants must meet all age requirements, proof of hunter education requirements and youth restrictions as provided in rule R657-5.

(iii) A person may obtain only one permit per species of big game, including limited entry, cooperative wildlife management unit, once-in-a-lifetime, conservation, landowner and general permits, except antlerless permits as provided in the Antlerless Addendum and permits as provided in Rule R657-42.

(b) A resident may apply in the big game drawing for the following permits:

(i) only one of the following:

(A) buck deer - limited entry and cooperative wildlife management unit;
(B) bull elk - limited entry and cooperative wildlife management unit; or
(C) buck pronghorn - limited entry and cooperative wildlife management unit; and
(ii) only one once-in-a-lifetime permit, including once-in-a-lifetime cooperative wildlife management unit permits.
(c) A nonresident may apply in the big game drawing for the following permits:
(i) all of the following:
(A) buck deer -limited entry;
(B) bull elk - limited entry;
(C) buck pronghorn - limited entry; and
(D) all once-in-a-lifetime species.
(ii) Nonresidents may not apply for cooperative management units through the big game drawing.
(d) A resident or nonresident may apply in the big game drawing by unit for:
(i) a statewide general archery buck deer permit; or
(ii) for general any weapon buck deer; or
(iii) for general muzzleloader buck deer; or
(iv) a dedicated hunter certificate of registration.
(2) Youth
(a) For purposes of this section “youth” means any person 17 years of age or younger on July 31.
(b) Youth applicants who apply for a general buck deer permit
(i) will automatically be considered in the youth drawing based upon their birth date.
(ii) 20% of general buck deer permits in each unit are reserved for youth hunters.
(iii) Up to four youth may apply together for youth general deer permits.
(iv) Preference points shall be used when applying.
(v) Any reserved permits remaining and any youth applicants who were not selected for reserved permits shall be returned to the general buck deer drawing.
(c) Youth applicants who apply for a managment buck deer permit
(i) will automatically be considered in the youth drawing based upon their birth date.
(ii) 30% of management buck deer permits in each unit are reserved for youth hunters.
(iii) Bonus points shall be used when applying
(iv) Any reserved permits remaining and any youth applicants who were not selected for reserved permits shall be returned to the management buck deer drawing.
(3) Senior
(a) For purposes of this section “senior” means any person 65 years of age or older on the opening day of the management buck deer archery season published in the guidebook of the Wildlife Board for taking big game.
(b) Senior applicants who apply for a management buck deer permit
(i) will automatically be considered in the senior drawing based upon their birth date.
(ii) 30% of management buck deer permits in each unit are reserved for senior hunters.
(iii) Bonus points shall be used when applying.
(c) Any reserved permits remaining and any senior applicants who were not selected for reserved permits shall be returned to the management buck deer drawing.
(4) Drawing Order
(a) Permits for the big game drawing shall be drawn in the following order:
(i) limited entry, cooperative wildlife management unit and management buck deer;
(ii) limited entry, cooperative wildlife management unit and management bull elk;

(iii) limited entry and cooperative wildlife management unit buck pronghorn;
(iv) once-in-a-lifetime;
(v) general buck deer – lifetime license;
(vi) general buck deer – dedicated hunter;
(vii) general buck deer - youth;
(viii) general buck deer; and
(ix) youth general any bull elk.
(b) Any person who draws one of the following permits is not eligible to draw a once-in-a-lifetime permit:
(i) limited entry, Cooperative Wildlife Management unit or management buck deer;
(ii) limited entry, Cooperative Wildlife Management unit or management bull elk; or
(iii) a limited entry or Cooperative Wildlife Management unit buck pronghorn.
(c) If any permits listed in Subsection (a)(i) through (a)(iii) remain after the big game drawing after all choices have been evaluated separately for residents and nonresidents, a second evaluation will be done allowing cross-over usage of remaining resident and nonresident permit quotas.
(5) Groups
(a) Limited Entry
(i) Up to four people may apply together for limited entry deer, elk or pronghorn; or resident cooperative wildlife management unit permits.
(b) Group applications are not accepted for management buck deer or bull elk permits.
(c) Group applications are not accepted for Once-in-a-lifetime permits.
(d) General season
(i) Up to four people may apply together for general deer permits
(ii) Up to two youth may apply together for youth general any bull elk permits.
(iii) Up to four youth may apply together for youth general deer permits.
(6) Waiting Periods
(a) Deer waiting period.
(i) Any person who draws or obtains a limited entry, management or cooperative wildlife management unit buck deer permit through the big game drawing process may not apply for or receive any of these permits again for a period of two seasons.
(ii) A waiting period does not apply to:
(A) general archery, general any weapon, general muzzleloader, conservation, sportsman, poaching-reported reward permits; or
(B) cooperative wildlife management unit or limited entry landowner buck deer permits obtained through the landowner.
(b) Elk waiting period.
(i) Any person who draws or obtains a limited entry, management or cooperative wildlife management unit bull elk permit through the big game drawing process may not apply for or receive any of these permits for a period of five seasons.
(ii) A waiting period does not apply to:
(A) general archery, general any weapon, general muzzleloader, conservation, sportsman, poaching-reported reward permits; or
(B) cooperative wildlife management unit or limited entry landowner bull elk permits obtained through the landowner.
(c) Pronghorn waiting period.

(i) Any person who draws or obtains a buck pronghorn or cooperative wildlife management unit buck pronghorn permit through the big game drawing may not apply for or receive any of these permits thereafter for a period of two seasons.

(ii) A waiting period does not apply to:

(A) conservation, sportsman, poaching-reported reward permits; or

(B) cooperative wildlife management unit or limited entry landowner buck pronghorn permits obtained through the landowner.

(d) Once-in-a-lifetime species waiting period.

(i) Any person who draws or obtains a permit for any bull moose, bison, Rocky Mountain bighorn sheep, desert bighorn sheep or Rocky Mountain goat may not apply for or receive an once-in-a-lifetime permit for the same species in the big game drawing or sportsman permit drawing.

(ii) A person who has been convicted of unlawfully taking a once-in-a-lifetime species may not apply for or obtain a permit for that species.

(e) Cooperative Wildlife Management Unit and landowner permits.

(i) Waiting periods and once-in-a-lifetime restrictions do not apply to purchasing limited entry landowner or cooperative wildlife management unit permits obtained through a landowner, except as provided in Subsection (ii).

(ii) Waiting periods are incurred and applied for the purpose of applying in the big game drawing as a result of obtaining a cooperative wildlife management unit bull moose permit through a landowner.

R657-62-19. Black Bear.

(1) Permit and Pursuit Applications.

(a) A person must possess or obtain a valid hunting or combination license in order to apply for or obtain a limited entry bear permit or bear pursuit permit.

(b) A person may not apply for or obtain more than one bear permit distributed pursuant to this rule within the same calendar year.

(c) Limited entry bear permits are valid only for the hunt unit and for the specified season designated on the permit.

(d)(i) Applicants may select up to three hunt unit choices when applying for limited entry bear permits. Hunt unit choices must be listed in order of preference.

(ii) Applicants must specify in the application a specific season for their limited entry or bear pursuit permit.

(e) Any person intending to use bait during their bear hunt must obtain a certificate of registration as provided in Sections R657-33-13 and 14.

(f) Applicants must meet all age requirements, proof of hunter education requirements and youth restrictions as provided in Sections 23-19-22.5, 23-19-11 and 23-20-20.

(2) Group applications are not accepted.

(3) Waiting periods.

(a) Any person who obtains a limited entry bear permit through the division drawing, may not apply for a permit thereafter for a period of two years.

(4) A person must complete a mandatory orientation course prior to applying for any bear permit offered through a division drawing or obtaining bear permits as described in R657-33-3(5).

R657-62-20. Antlerless Species.

(1) Permit Applications.

(a) A person must possess or obtain a valid hunting or combination license in order to apply for or obtain an antlerless permit.

(b) Applicants must meet all age requirements, proof of hunter education requirements and youth restrictions as provided in rule R657-5.

(c) A person may apply in the drawing for and draw the following permits, except as provided in Subsection (d):

(i) antlerless deer;

(ii) antlerless elk;

(iii) doe pronghorn; [~~and~~]

(iv) antlerless moose, if available;

(v) ewe Rocky Mountain bighorn sheep, if available; and

(vi) ewe desert bighorn sheep, if available.

(d)(i) Any person who has obtained a buck pronghorn permit[~~ or a~~], bull moose permit, ram Rocky Mountain bighorn sheep permit, or a ram desert bighorn sheep permit may not apply in the same year for a doe pronghorn permit[~~ or ~~], antlerless moose permit, ewe Rocky Mountain bighorn sheep permit, or a ewe desert bighorn sheep permit, respectively, except for permits remaining after the drawing as provided in R657-62-15.

(ii) A resident may apply for an antlerless moose, ewe Rocky Mountain bighorn sheep, or ewe desert bighorn sheep in the antlerless drawing, but may not apply for more than one of those permits in a given year.

(iii) A nonresident may apply for all antlerless species in a given year.

(e) Applicants may select up to five hunt choices when applying for antlerless deer, antlerless elk and antlerless pronghorn.

(f) Applicants may select up to two hunt choices when applying for antlerless moose.

(g) Applicants may select up to two hunt choices when applying for ewe bighorn sheep permits.

(h) Hunt unit choices must be listed in order of preference.

([~~h~~]i) A person may not submit more than one application in the antlerless drawing per species. (2) Youth applications.

(a) For purposes of this section, "youth" means any person 17 years of age or younger on July 31.

(b) Twenty percent of the antlerless deer, elk and doe pronghorn permits are reserved for youth hunters.

(c) Youth applicants who apply for an antlerless deer, elk, or doe pronghorn permit as provided in this Subsection, will automatically be considered in the youth drawing based upon their birth date.

(3) Drawing Order

(a) Permits are drawn in the order listed in the guidebook of the Wildlife Board for taking big game.

(b) Any reserved permits remaining and any youth applicants who were not selected for reserved permits shall be returned to the antlerless drawing.

(c) If permits remain after all choices have been evaluated separately for residents and nonresidents, a second evaluation will be done allowing cross-over usage of remaining resident and nonresident permit quotas.

(4) Group Applications

(a) Up to four hunters can apply together for antlerless deer, antlerless elk and doe pronghorn

(b) Group applications are not accepted for antlerless moose or ewe bighorn sheep permits.

(c) Youth hunters who wish to participate in the youth drawing must not apply as a group.

(5) Waiting Periods

(a) Antlerless moose waiting period.

(i) Any person who draws or obtains an antlerless moose permit or a cooperative wildlife management unit antlerless moose permit through the antlerless drawing process, may not apply for or receive an antlerless moose permit thereafter for a period of five seasons.

(ii) A waiting period does not apply to cooperative wildlife management unit antlerless moose permits obtained through the landowner.

(b) Ewe bighorn sheep waiting period.

(i) Any person who draws or obtains a ewe bighorn sheep permit through the antlerless drawing process may not apply for or receive a permit for the same species of ewe bighorn sheep for a period of five seasons.

R657-62-21. Sandhill Crane, Sharp-Tailed and Greater Sage Grouse.

(1) Permit applications.

(a) A person may obtain only one Sandhill Crane permit each year.

(b) A hunting or combination license is required when taking Sandhill Crane, Sharp-Tailed and Greater Sage Grouse and may be purchased when applying for the permit.

(c) Applicants must meet all age requirements, proof of hunter education requirements and youth restrictions as provided in Utah Code 23-19-24, 23-19-11 and 23-20-20.

(d) Applicants may select up to four hunt choices. Hunt unit choices must be listed in order of preference.

(2) Youth applications.

(a) For purposes of this section, "youth" means any person 17 years of age or younger on July 31for the purpose of obtaining Sandhill Crane, Sharp-tailed grouse and Greater Sage grouse permits.

(b) Fifteen percent of the Sandhill Crane, Sharp-tailed grouse and Greater sage grouse permits are reserved for youth hunters.

(c) Youth applicants who apply for a Sandhill Crane, Sharp-tailed grouse or Greater sage grouse permit as provided in this Subsection, will automatically be considered in the youth drawing based upon their birth date.

(3) Group Applications

(a) Up to four people may apply together.

(b) Youth hunters who wish to participate in the youth drawing must not apply as a group.

(4) Waiting Periods do not apply.

R657-62-22. Swan.

(1) Permit applications.

(a) A person may obtain only one swan permit each year.

(i) A person may not apply more than once annually.

(b) A Utah hunting or combination license is required when hunting Swan and may be purchased when applying for the permit.

(c) The division shall issue no more than the number of swan permits authorized by the U.S. Fish & Wildlife Service each year.

(d) A person must complete a one-time orientation course before applying for a swan permit, except as provided under Subsection R657-9-6 (3) (b).

(i) Remaining swan permits available for sale shall be issued only to persons having previously completed the orientation course.

(e) Applicants must meet all age requirements, proof of hunter education requirements and youth restrictions as provided in Utah Code 23-19-24, 23-19-11 and 23-20-20.

(2) Youth applications.

(a) For purposes of this section, "youth" means any person 17 years of age or younger on July 31st of the year in which the youth hunting day is held, as provided in the guidebook of the Wildlife Board for taking waterfowl, Wilson's snipe and coot.

(b) Fifteen percent of the Swan permits are reserved for youth hunters.

(c) Youth who apply for a swan permit will automatically be considered in the youth permit drawing based on their birth date.

(3) Group applications.

(a) Up to four people may apply together in a Group Application.

(b) Up to four youth may apply together in a Group Application.

(4) Waiting period does not apply.

R657-62-23. Cougar.

(1) Permit Applications

(a) A person must possess or obtain a valid hunting or combination license to apply for or obtain a cougar limited entry permit**.**

(b) A person may not apply for or obtain more than one cougar permit for the same year.

(c) Limited entry cougar permits are valid only for the limited entry management unit and for the specified season provided in the hunt tables of the proclamation of the Wildlife Board for taking cougar.

(d) Applicants may select up to three management unit choices when applying for limited entry cougar permits. Management unit choices must be listed in order of preference.

(e) If permits remain after all choices have been evaluated separately for residents and nonresidents, a second evaluation shall be done allowing cross-over usage of remaining resident and nonresident permit quotas.

(f) Any limited entry cougar permit purchased after the season opens is not valid until seven days after the date of purchase.

(g) Applicants must meet all age requirements, proof of hunter education requirements and youth restrictions as provided in Utah Code 23-19-22.5, 23-19-11 and 23-20-20.

(2) Group applications are not accepted.

(3) Waiting periods.

(a) Any person who draws or purchases a limited entry cougar permit valid for the current season may not apply for a permit thereafter for a period of three seasons.

(b) Waiting periods are not incurred as a result of purchasing cougar harvest objective permits.

R657-62-24. Sportsman.

(1) Permit applications.

(a) One sportsman permit is offered to residents for each of the following species:

(i) desert bighorn (ram);
(ii) bison (hunter's choice);
(iii) buck deer;
(iv) bull elk;
(v) Rocky Mountain bighorn (ram);
(vi) Rocky Mountain goat (hunter's choice);
(vii) bull moose;
(viii) buck pronghorn;
(ix) black bear;
(x) cougar; and
(xi) wild turkey.

(b) Bonus points shall not be awarded or utilized when applying for or obtaining sportsman permits.

(2) Group applications are not accepted.

(3) Waiting Periods

(a) Any person who applies for or obtains a Sportsman Permit is subject to all waiting periods and exceptions as applicable to the species pursuant to rule R657-41.

(b) Once-in-lifetime waiting periods

(i) If you have obtained a once-in-a-lifetime permit through the sportsman drawing you are ineligible to apply for that once-in-a-lifetime species through the big game drawing.

(ii) If you have obtained a once-in-a-lifetime permit through the big game drawing you are ineligible to apply for that once-in-a-lifetime species through the sportsman drawing.

(c) Limited Entry waiting periods

(i) Waiting periods do not apply to Sportsman deer, elk, pronghorn, bear or cougar.

(ii) Waiting period will not be incurred for receipt of a Sportsman deer, elk, pronghorn, bear or cougar.

R657-62-25. Turkey.

(1) Permit applications.

(a) A person must possess a valid hunting or combination license in order to apply for or obtain a wild turkey permit.

(b) A person may obtain only one limited entry or general spring wild turkey permit each year. A person may obtain wild turkey conservation permits in addition to obtaining one limited entry or spring wild turkey permit as well as a fall general season permit.

(c) Applicants may select up to five hunt choices when applying for limited entry turkey permits. Hunt unit choices must be listed in order of preference.

(d) A turkey permit allows a person, using any legal weapon as provided in Section R657-54-7, to take one bearded turkey within the area and season specified on the permit.

(2) Group applications.

(a) Up to four people may apply together in a Group Application.

(b) Youth hunters who wish to participate in the youth drawing must not apply as a group.

(3) Waiting period does not apply.

(4) Youth permits

(a) Up to 15 percent of the limited entry permits and fall general season permits are available to youth hunters.

(b) For purposes of this section "youth" means any person who is 17 years of age or younger on July 31.

(c) Youth who apply for a turkey permit will automatically be considered in the youth permit drawing based on their birth date.

(d) Bonus points shall be used when applying for youth turkey permits.

(e) Youth who are successful in obtaining a limited entry turkey permit but unsuccessful in harvesting a bird during the limited entry hunt season, may use the limited entry turkey permit to participate in the youth 3-day turkey hunt and the spring general season turkey hunt provided no more than one bird is harvested.

KEY: wildlife, permits
Date of Enactment or Last Substantive Amendment: March 13, 2017
Notice of Continuation: April 14, 2014
Authorizing, and Implemented or Interpreted Law: 23-14-18; 23-14-19

R657. Natural Resources, Wildlife Resources.
R657-71. Removal of Wild Deer from Domesticated Elk Facilities.
R657-71-1. Purpose and Authority. Under the authority of Utah Code Annotated Sections 23-14-1, 23-14-3, 23-14-18, 23-14-19, and 23-19-1, this rule authorizes the division to issue a certificate of registration for the lethal removal of wild deer that are found within the enclosures of domesticated elk facilities.

R657-71-2. Definitions.
(1) Terms used in this rule are defined in Section 23-13-2.

R657-71-3. Application for a Certificate of Registration.
(1) An owner or operator of a lawfully permitted domesticated elk facility that locates wild deer within the boundary of their facility must immediately notify the division.
(2) Upon confirmation by the division that there are wild deer confined within the perimeter of a domesticated elk facility, the owner or operator may apply for a certificate of registration authorizing the lethal removal of deer.
(3) As a condition of receiving a certificate of registration, the division may, in cooperation with the Department of Agriculture, identify modifications or improvements to the domesticated elk facility that will ensure a secure perimeter and prevent future entry of wild cervids into the facility.
(4)(a) Only the owner or operator, their immediate family members, or facility employees may be authorized to lethally remove deer from a domesticated elk facility.
(b) Any individual authorized to act under a certificate of registration must:
(i) have passed a division authorized hunter education course;
(ii) be eligible to legally possess and handle a firearm; and
(iii) not be under an active suspension or revocation of their big game hunting privileges.
(c) Only weapons authorized by the division's big game rule, R657-5, may be used to lethally remove deer under the certificate of registration.

R657-71-4. Terms of Certificate of Registration.
(1) The certificate of registration shall identify:
(a) the name and contact information for the domesticated elk facility;
(b) the number of wild deer that are to be lethally removed;
(c) the names of the individuals authorized to act under the certificate of registration;
(e) the dates authorized for lethal removal;
(f) the reporting date for which the division must receive confirmation that all wild deer have been removed from the facility; and
(g) directions to the certificate of registration holder regarding carcass delivery to the division for donation and disease sampling.
(2)(a) The certificate of registration may only authorize lethal removal of wild deer within the perimeter of the facility.
(3) A certificate of registration may not authorize lethal removal of deer outside of the facility perimeter fence.

(4) No fee may be assessed by the certificate of registration holder, any individual acting under the authority of the certificate of registration, or the individual or business entity operating the facility in order exercise the privileges authorized by the certificate of registration.

(5) Neither the certificate of registration holder nor any individual acting under its authority may commercialize any wildlife or their parts that are removed from a domestic elk facility pursuant to this rule.

(6)(a) A certificate of registration may allow lethal removal of wild deer for a specified term between August 1 to December 31.

(b) Lethal removal of wild deer may not be authorized between January 1 through July 31.

R657-71-5. Reporting Requirements and Disease Testing.

(1)(a) Every wild deer and all parts lethally removed from the facility must be collected and provided to division promptly following removal.

(b) Upon locating a deer carcass not initially recovered, the owner or operator shall promptly deliver the carcass to the division, including any attached antlers.

(2) The certificate of registration holder must deliver each carcass to the division in a condition allowing for meat donation and disease sampling.

(3) The certificate of registration holder shall notify the Department of Agriculture of all lethal removal efforts, including the following:

(a) deer that are lethally removed and delivered to the division;

(b) deer that are shot but not recovered; and

(c) any deer carcass that is not initially recovered but located and subsequently delivered to the division.

R657-71-6. Reservation of Division Authority.

(1) Nothing herein shall preclude the division from unilaterally removing wild deer from domesticated elk facilities, consistent with statutory notification provisions.

(2) If the division determines that issuance of a certificate of registration for lethal removal is appropriate, the division may determine the number of deer that may be removed under a certificate of registration based upon the individual circumstances of each request, including but not limited to:

(a) the age and sex of the animals confined;

(b) threats to the wildlife resource; and

(c) potential impacts to the owner or operator.

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
MICHAL D. FOWLKS
Division Director

MEMORANDUM

Date: October 10, 2017

To: Wildlife Board and Regional Advisory Council Members

From: Randy Larsen, Wildlife Research Coordinator

Subject: Statewide Management Plan for Pronghorn

The current statewide management plan for pronghorn was approved in 2009 and is set to expire in December 2017. The Utah Division of Wildlife Resources (UDWR) has drafted a new plan for management of pronghorn in collaboration with interested stakeholders.

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

1) This plan is proposed as a 10-year plan that will be subject to review in 2027.
2) We have updated the background and natural history information in the plan to reflect current scientific understanding. Key additions to this part of the plan include sections on depredation of agricultural crops, impacts of feral horses, migration/movements, and the importance of available water.
3) Individual unit plans will be completed or updated by the end of 2018.
4) We recommend using transplants to augment populations that are below objective and to reintroduce populations into historically occupied habitat.
5) We propose switching to an age-based management strategy for pronghorn and managing to a 3-year average age between 2.0 and 3.0, while considering trends. Pronghorn are very different from cervids (e.g., deer, elk, or moose) in that they reach peak horn size at an early age (typically by 3 years of age). They also experience relatively high rates of adult mortality (often 20% or more), even in the absence of harvest. Thus, managing for an older age class of bucks is unnecessary for this species. Managing to this new objective will maintain sufficient numbers of quality bucks while increasing hunting opportunity for pronghorn in Utah.

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UTAH DNR WILDLIFE RESOURCES

UTAH PRONGHORN
STATEWIDE MANAGEMENT PLAN

UTAH DIVISION OF WILDLIFE RESOURCES
DEPARTMENT OF NATURAL RESOURCES

UTAH DIVISION OF WILDLIFE RESOURCES
STATEWIDE MANAGEMENT PLAN FOR PRONGHORN

I. PURPOSE OF THE PLAN

A. General

This document is the statewide management plan for pronghorn in Utah. This plan will provide overall direction and guidance to Utah's pronghorn management activities. Included in the plan is an assessment of current life history and management information, identification of issues and concerns relating to pronghorn management in the state, and the establishment of goals, objectives and strategies for future management. The statewide plan will provide direction for establishment of individual pronghorn unit management plans throughout the state.

B. Dates Covered

This pronghorn plan will be in effect upon approval of the Wildlife Board (expected date of approval November 30, 2017) and subject to review within 10 years.

II. SPECIES ASSESSMENT

A. Natural History

The pronghorn (*Antilocapra americana*) is the sole member of the family Antilocapridae and is native only to North America. Fossil records indicate that the present-day form may go back at least a million years (Kimball and Johnson 1978). The name pronghorn is descriptive of the adult male's large, black-colored horns with anterior prongs that are shed each year in late fall or early winter. Females also have horns, but they are shorter and seldom pronged. Mature pronghorn bucks weigh 45–60 kilograms (100–130 pounds) and adult does weigh 35–45 kilograms (75–100 pounds).

Pronghorn are North America's fastest land mammal and can attain speeds of approximately 72 kilometers (45 miles) per hour (O'Gara 2004a). They have a large capacity respiratory system and slender, strong legs that lack the dew claws found in the deer family. Pronghorn have large eyes that protrude from the side of the head and provide wide-angle vision thought to be equivalent to an 8-power binocular (O'Gara 2004a). The pelage is darker brown on the back and sides with light colored hair on the belly, throat, and rump. Bucks exhibit prominent black cheek patches with additional black coloring on the face.

Historically, pronghorn ranged throughout much of the United States west of the Mississippi River. Pronghorn were also found in desert habitats in northern Mexico and prairie habitats of southern Canada (Einarsen 1948). Journal entries of the Lewis and Clark expedition indicated that pronghorn numbers were highest in the Great Plains,

where 62 were recorded as harvested for food (Thwaites 1905). The same journals indicated only 3 pronghorn were taken west of the Continental Divide (Thwaites 1905).

Some evidence suggests pronghorn may have numbered over 40 million in North America during the early 1800s (Kimball and Johnson 1978). By 1900, however, pronghorn populations had declined by more than 99 percent due to fencing, habitat loss, and unregulated hunting (Yoakum 1968, Yoakum and O'Gara 2000). Although most ancestral habitats are currently occupied, individual herds are much smaller and many are isolated compared to historical populations. Total population size increased from an estimated 30,500 in 1924 to more than a million pronghorn in 1983 (Yoakum 1986). Current estimates suggest more than 800,000 pronghorn occur across their range in North America (Vore 2016).

Early Utah records (1900s) suggest pronghorn were present throughout Utah, and populations were most abundant in the west desert from Beaver County north to the Idaho state line and in Daggett County in northeastern Utah adjacent to the Wyoming state line (Smith and Beale 1980). Beginning in 1945 and continuing to the present, transplants of pronghorn to other areas in the state have resulted in a wider distribution with pronghorn now occurring in most of Utah's suitable desert habitats (Figure 1). Transplants and effective management have increased the statewide population to an estimated 15,695 animals (Table 1).

B. Management

1. UDWR Regulatory Authority

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

2. Past and Current Management

Management activities for pronghorn in Utah have included transplants, fixed-wing aerial surveys, population classification, harvest, and some research. The first established hunting season in Utah occurred in 1945 in Daggett County, where 50 either sex permits were available to hunters. The total number of pronghorn harvested in Utah each year has generally increased over time to more than 1,200 in recent years (Table 2). The distribution of pronghorn has also increased throughout the state (Figure 1), and herds that support harvest now occur in 28 units or subunits (Table 1).

Counts of pronghorn populations to establish trends in abundance are conducted at least once every two years with fixed-wing aircraft between February and April. Those counts are supplemented with pre-season classification surveys from the ground in August and September to determine fawn production and buck:doe ratios. Hunter surveys occur after fall hunting seasons to determine harvest success.

C. Habitat

Throughout pronghorn range, an estimated 53 percent of populations occur in grassland, 47 percent in shrub steppe, and < 1 percent in desert (Yoakum 2004*a*). In Utah, the majority of pronghorn populations occur in shrub-steppe habitat. Large expanses of open, rolling or flat terrain characterize the topography of most occupied habitats. Of particular importance in sustaining pronghorn populations is a forb component in the vegetative mix (Yoakum 2004*a*). The presence of succulent forbs is essential to lactating females and thus fawn survival during the spring and early summer (Ellis and Travis 1975, Howard et al. 1990). High quality browse, protruding above snow level, can be important for overwinter survival in some pronghorn populations (Yoakum 2004*a*).

The availability and distribution of free (drinking) water is also important for pronghorn populations and their long-term conservation. Beale and Smith (1970) reported that pronghorn were not observed drinking (although water was readily available) when forbs were abundant with high (> 75%) moisture content. However, during dry periods, pronghorn consumed up to 3 liters of water per animal per day. In Wyoming's Red Desert, 95 percent of 12,465 pronghorn counted from the air occurred within 4 miles of a water source (Sundstrom 1968). Much of Utah's pronghorn habitat lacks naturally available water and water developments (e.g., guzzlers or wells) will be important for persistence and expansion of pronghorn populations within the state.

D. Population Status

Pronghorn populations occur in much of the suitable habitat found in Utah, but often at relatively low densities. Efforts to reintroduce pronghorn into suitable habitats and to augment existing populations are ongoing. Unit management plans define population objectives, goals, and strategies for each herd unit, and the current statewide population estimate is 15,695 animals (Table 1). Antlerless permits, trapping efforts, or a combination of both are needed to manage some populations at accepted levels.

E. Research

Only limited research has been conducted on pronghorn in Utah. This research has centered on studies of forage use, water requirements, and productivity of pronghorn populations in western Utah (Smith et al. 1965, Beale and Smith 1970, Smith 1974, Beale and Holmgren 1975). Also included were studies of collaring devices and immobilization with selected drugs (Beale 1966, Beale and Smith 1967). Udy (1953)

studied the effects of predator control on pronghorn populations, and Beale and Smith (1973) looked at bobcat (*Lynx rufus*) predation on pronghorn fawns. More recently, research has focused on use of water sources by pronghorn and interactions between pronghorn and feral horses (Larsen et al. 2011, Larsen et al. 2012, Hall et al. 2016).

III. ISSUES AND CONCERNS

A. Habitat Degradation and Loss

The size and productivity of pronghorn populations are primarily determined by the quantity and quality of habitats available to meet nutritional needs throughout the year. Pronghorn habitat has been and will continue to be lost in parts of Utah as our human population grows due to urbanization, construction of roads, off-highway vehicle (OHV) use, energy development, etc. Degradation of pronghorn habitats is also of concern due to changes in vegetation associated with drought, invasive plants, persistent spring grazing, wildfire, and other disturbances.

A critical limiting factor in some of Utah's pronghorn habitat is the lack of succulent forbs on spring/summer ranges. In other areas, loss of shrubs on winter ranges is of primary concern. Increased fire frequency due to invasive plants such as cheatgrass (*Bromus tectorum*) is a risk for much of Utah's pronghorn habitat. In other areas, encroachment of shrublands by pinyon pine (*Pinus edulis*) or Juniper (*Juniperus* sp.) have reduced availability of forbs and shrubs. As sagebrush ranges and other desert browse habitats mature and lose forb understory, there is a need for range enhancement to improve or even maintain carrying capacity for pronghorn. Utah's Watershed Restoration Initiative can play an important role in maintaining quality pronghorn habitat in the state.

B. Water Development

On average, pronghorn require over 3 liters of water each day in the summer (Lee et al. 1998). Continued development of water sources is a critical component of maintaining and expanding pronghorn in Utah. Additionally, regular maintenance of existing water catchments (e.g., guzzlers) continues to be a serious problem shared by UDWR, the public land management agencies, and private landowners. Without a commitment to regular maintenance, benefits from water development to pronghorn and other wildlife are short lived. Although water developments can benefit pronghorn, they must be planned, designed, and spaced appropriately to maximize their effectiveness (Larsen et al. 2012).

C. Fences

Fences can be a major problem on pronghorn ranges. Certain types of fences create barriers to movement of pronghorn between seasonal ranges and water or feeding areas. Fencing of water sources can also prevent access by pronghorn. Woven wire fences

constructed to control movements of domestic sheep are of special concern. Fencing specifications most compatible with pronghorn movement consist of a smooth bottom wire 40 – 46 cm (16–18 inches) above the ground (Autenrieth et al. 2006).

D. Livestock

Cattle, sheep, and horses are the primary domestic livestock species sharing rangelands with pronghorn, and about 99 percent of pronghorn roam rangelands with livestock at some time during the year (Yoakum and O'Gara 1990). Although those animals have coexisted with pronghorn for centuries, there can be specific situations that are cause for concern. The abundance of forbs and grasses during late gestation and early lactation is a major factor in pronghorn fawn survival. Reduced availability of that forage component due to consumption by livestock in shrub-steppe habitats can result in reduced carrying capacity of rangelands for pronghorn.

On rangelands in good ecological condition, competition for forage is not considered a significant factor. Pronghorn are opportunistic foragers and have strong preference for forbs and shrubs. Grasses are not a major forage component for pronghorn and make up less than 10 percent of the annual diet (Yoakum and O'Gara 2000). Yoakum (2004c) summarized 16 studies and found that cattle and pronghorn experienced limited competition, with an average dietary overlap of less than 25 percent. In areas dominated by grasses, cattle may have a positive influence on pronghorn by removing grasses and increasing availability of forbs and shrubs preferred by this species. Several researchers have observed competition between sheep and pronghorn for forbs and shrubs (Yoakum and O'Gara 1990). Dietary overlap with domestic sheep can be as high as 67 percent (Yoakum 2004*b*). The presence of domestic livestock on pronghorn fawning areas has also been shown to displace females to less suitable habitat during this critical time (McNay and O'Gara 1982). There is minimal dietary overlap between domestic horses and pronghorn.

E. Feral Horses

The horse (*Equus caballus*) is a feral ungulate introduced to North America during the 16th century (Mills and McDonnell 2005). Feral horses have become widespread in Utah where they now occur in wild, free-roaming herds in many areas of Utah currently occupied by pronghorn. Numbers of horses exceed population objectives by almost 30,000 animals in western North America and many populations continue to grow (National Research Council 2013). Feral horses can have negative impacts to vegetation and soil on rangelands, particularly when densities are high (Davies et al. 2014). Moreover, recent research identifies competition between pronghorn and feral horses at water sources as a concern. Horses can limit access to water sources for pronghorn, and pronghorn demonstrated increased vigilance and decreased time foraging or drinking when horses were present (Hall et al. 2016, Gooch et al. 2017).

F. Disease

The most common diseases that affect pronghorn in Utah are bluetongue and epizootic hemorrhagic disease (EHD). Both diseases are caused by viruses, and cattle are thought to be the primary reservoir for each. Epizootic outbreaks of bluetongue and EHD generally occur during late summer and early autumn, and all sex and age classes may be affected. The most important vectors for bluetongue and EHD are gnats of the genus Culicoides, and die-offs can be expected to terminate shortly after temperatures drop below freezing in the fall. Bluetongue caused the loss of 3,200 pronghorn in eastern Wyoming during 1976 and an additional 300 in 1984 (Thorne et al. 1988). Die-offs due to EHD are not well documented, largely due to the difficulty in distinguishing it from bluetongue, but losses to this disease were suspected in several western states and Canadian provinces (O'Gara 2004*b*). EHD outbreaks and losses have been identified in mule deer (*Odocoileus hemionus*) from southern Utah and are suspected to occur in other species. Although losses to these diseases can be significant, consecutive year die-offs are seldom observed and populations generally recover quickly.

G. Predation

In Utah, pronghorn are preyed upon by several predators including bobcats, coyotes (*Canis latrans*), golden eagles (*Aquila chrysaetos*), mountain lions (*Puma concolor*), and others. Predation occurs throughout the year, however, fawns are particularly vulnerable during the initial weeks following birth and survival rates can be low. Beale and Smith (1973) documented bobcats as significant predators on pronghorn fawns in a population in western Utah where they accounted for nearly half (27/55) of all mortalities.

The role of predation in limiting pronghorn recruitment, however, is dependent on many factors, including where populations are relative to carrying capacity and habitat quality. Newly established populations of pronghorn may benefit from predator control until an adequate number of does and fawns are available to outpace losses associated with predation. During drought years, fawns may be more susceptible to predation due to a lack of vegetative hiding cover and fewer rodents and other small mammals for coyotes to eat (Shannon et al. 2009). Menzel (1994) demonstrated increased fawn survival from two years of coyote control, however later surveys showed no increase in overall population size. Smith, et al. (1986) showed that predator control was most effective immediately prior to fawning and should be conducted for at least three years to be effective.

H. Human Interaction

Human interaction with pronghorn in Utah is related mostly to hunting, viewing, and photographing. The visibility of pronghorn in open terrain, especially near roads and highways, makes them popular subjects for non-consumptive users. Recreational use of Utah's desert and shrub-steppe habitats is increasing each year and has the potential to negatively impact pronghorn habitat if not carefully managed.

I. Energy Development

The recent expansion of energy development in the West has the potential to impact pronghorn and their habitat. Berger et al. (2007) showed that some pronghorn continued to use areas that were heavily developed, whereas other animals showed strong avoidance to such areas. Sawyer et al. (2002) suggested that energy development could sever migrations corridors for pronghorn and influence the distribution of pronghorn on winter ranges. These changes in distribution could alter the capacity of those ranges to support pronghorn.

In Utah, intensive energy development has occurred within the Myton Bench, East Bench, Bonanza, and Halfway Hollow areas in northeastern Utah. In all of those units, development has occurred or is planned at 1 well per 40-acres (up to 16 wells per section). The direct loss of habitat in these developed areas is approximately 4 acres per well, or about 10 percent of each section. In addition to direct habitat loss, indirect impacts from increased traffic, increased human presence, spread of invasive plants, and other disturbances could lead to avoidance by pronghorn and reduced carrying capacity. Those impacts, both direct and indirect, will likely be compounded during periods of drought.

J. Transplants/Reintroductions

Most of Utah's current pronghorn populations are a result of transplants (Table 3). Since 1975, the Plateau, Parker Mountain pronghorn population has provided over 5,400 pronghorn for release into areas throughout Utah, as well as other western states. Although few areas of unoccupied pronghorn habitat remain in the state, it is important to continue to use surplus animals from selected units to start new populations or augment existing populations during times of low production. A list of potential translocation sites is provided in Table 4.

K. Depredation

Pronghorn depredation on croplands is an ongoing challenge and, in some cases, can be a significant issue for private landowners. UDWR has committed substantial resources to identify and address depredation concerns. The Landowner Association and Cooperative Wildlife Management Unit programs are designed to help private landowners benefit from having pronghorn on their property. Additionally, mitigation permits and vouchers are provided to landowners to alleviate damages to agricultural crops and decrease pronghorn densities. Depredation problems should be addressed within the sideboards of state code, rule, and policy, and in a timely and efficient manner to help private landowners have more tolerance of pronghorn on their property.

L. Movements and Migration

Pronghorn exhibit variation in movements and migration patterns across populations in relation to differences in habitat and weather conditions. Historically, many pronghorn

likely migrated long distances to meet seasonal needs, particularly in northern climates where deep snow forced animals from summer ranges. Fencing and reduction of pronghorn populations by 99 percent during settlement likely eliminated the cultural knowledge associated with many of these movement patterns for individual herds of pronghorn.

Nonetheless, some existing pronghorn populations maintain long-distance movement patterns. Some members of the Sublette herd in Wyoming, for example, migrate more than 240 kilometers (150 miles) from Jackson Hole to the Red Desert (Sawyer et al. 2005). Similarly, marked animals on the prairies in Canada moved more than 225 kilometers (140 miles) south during winter (Hnatiuk 1972). Other populations move much less. In Idaho, average distance between summer and winter ranges varied from 33 to 54 km (20-33 miles), but some individuals moved less than 5 km (3 miles) annually. Little is known about movements or migration of pronghorn in Utah. Average home range size for 6 adult females in Utah's west desert was 126 square kilometers (49 square miles) during the late 1990s (Bates 2000). Utah's Migration Initiative can play an important role in filling this information gap by identifying movement corridors, timing of migrations, and distances traveled. This information will help managers more effectively work with public and private landowners to preserve and restore movement corridors and other critical habitats.

IV. USE AND DEMAND

Although the demand for buck pronghorn hunting permits does not approach that of other big game species in Utah, there is considerable interest in hunting pronghorn. Since Utah's big game drawing was initiated in 1998, the number of applicants for buck pronghorn hunting permits has increased from a total of 3,007 applicants in 1998 to 11,187 applicants in 2017 (Table 5). Commensurate with increased demand for these permits, the odds of drawing have decreased since 1998. The odds of drawing a hunting permit for buck pronghorn were 1 in 8.7 for residents in 2017 (1 in 53.0 for nonresidents) compared to 1 in 6.1 for residents (1 in 5.0 for nonresidents) in 1998. Over the past 10 years, more archery and muzzleloader hunting permits have been provided, resulting in lower hunter success rates and increased draw odds.

Unlike antlered cervids such as elk (*Cervus canadensis*) or mule deer, pronghorn achieve maximize horn size at an early age. Maximum horn size was attained at 2–3 years of age for pronghorn in Montana (Mitchell and Maher 2001) and age did not predict Boone and Crockett score beyond 3 years in Alberta (Morton et al. 2008). Similarly, most pronghorn reached maximum horn size by 4 years of age in New Mexico (Brown et al. 2002). Data from Utah show the same pattern with no increase in average horn length after 3 years of age (UDWR, unpublished data). Moreover, annual mortality of male pronghorn in populations that are not hunted has been estimated as high as 24 percent (Keller et al. 2013). Thus, additional hunting opportunities can be provided while still maintaining quality hunting opportunities by managing for relatively young age classes in the harvest.

Pronghorn are also of high interest to the public as a watchable wildlife species. Due to their

behavior (active in the daytime) and the habitat they occupy, pronghorn are often visible to recreationists. The proximity of some of Utah's pronghorn populations to the Wasatch Front also contributes to the interest of wildlife viewers in watching pronghorn.

V. CONCLUSION

Pronghorn are the only surviving member of the family Antilocaptridae and occur only in North America. Consequently, pronghorn are an important part of Utah's wildlife heritage. As occupants of some of the state's more xeric habitats, they are dependent on limited resources, especially forbs and water. UDWR has spent considerable time and resources to reintroduce pronghorn to most of the suitable habitats in the state. Management needs will be addressed as necessary on individual herd units in order to maintain viable and well-distributed pronghorn populations for the benefit of all Utah residents. As a unique and impressive part of the state's desert and shrubland fauna, pronghorn are important to the state's wildlife heritage and should be managed for their intrinsic, scientific, educational, and recreational values.

VI. STATEWIDE MANAGEMENT GOALS AND OBJECTIVES

A. Population Management Goal: Manage pronghorn to their population objectives and within the carrying capacity of available habitats.

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

Objective 1: Increase pronghorn populations within the state as conditions allow, and manage pronghorn populations to their unit objectives.

Strategies:

a. By the end of 2018, complete or update individual unit pronghorn management plans including population goals and objectives for all herd units in the state (unit plans must be consistent with this statewide management plan).
b. Conduct aerial surveys on all pronghorn management units at least every other year to monitor population trends and herd composition.
c. Conduct late summer (pre-season) herd classifications on each unit annually.
d. Use population models and sightability estimates to estimate populations and establish trends.
e. Use antlerless harvest to manage herds to population objectives and to address habitat issues or depredation concerns.
f. Implement research or increased monitoring of pronghorn in Utah including herd units used for translocation (e.g., Parker Mountain) and those that are chronically below population objectives to improve understanding, identify problems and recommend solutions.
g. Investigate and manage diseases that threaten pronghorn populations.

Objective 2: Augment or reintroduce pronghorn populations as needed and as source populations allow.

Strategies:

a. Augment pronghorn populations as needed to meet population objectives (Table 4).
b. Establish new pronghorn populations in vacant habitat (Table 4).
c. Coordinate with stakeholders to augment or reintroduce populations.
d. Monitor the population response of pronghorn in augmentation areas.

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

Objective 1: Maintain or enhance the quantity and quality of pronghorn habitat.

Strategies:

a. Identify crucial pronghorn habitats and work with public land managers and private landowners to protect and enhance those areas.
b. Assist public land management agencies in monitoring the condition and trend

of pronghorn habitats.

c. Work with public land management agencies to minimize, and where necessary, mitigate loss or degradation of pronghorn habitat.
d. Under the Utah Watershed Restoration Initiative, design, implement, and monitor the effectiveness of habitat improvement projects to benefit pronghorn.
e. As part of the Utah Migration Initiative, identify migration routes and corridors along with any barriers (e.g., fences) that impede pronghorn. Modify or mitigate any barriers that impede movement of pronghorn.
f. Work with public land management agencies to ensure that any new fence construction within pronghorn habitat follows specifications published in the 2006 Pronghorn Management Guides (Autenrieth et al. 2006) or BLM Fencing Manual (1741). Remove or modify any fences that no longer meet installation objectives.
g. Encourage public land managers and permittees to manage spring livestock grazing in crucial pronghorn fawning areas to promote forb growth for lactating females.
h. Work with agency and industry representatives to design mitigation or habitat treatments that will offset the impacts of energy development or other surface disturbing actions in pronghorn habitat.
i. In conjunction with other land management agencies, develop and implement a maintenance schedule for existing water developments and develop new water sources as needed.

C. Recreation Goal: Provide opportunities for hunting and viewing of pronghorn

Objective 1: Increase hunting opportunities for pronghorn using a variety of harvest strategies.

Strategies:

a. Manage all units/subunits for a 3-year average age of harvested animals between 2.0 to 3.0 years of age, while taking trends into account.
b. Use archery and muzzleloader hunts to distribute hunters and provide additional hunting opportunities.

Objective 2: Increase opportunities for viewing pronghorn, while educating the public concerning needs of pronghorn.

Strategies:

a. Coordinate with UDWR's Outreach Section and use social media to highlight pronghorn and their uniqueness as part of Utah's natural heritage.
b. Highlight the value and importance of the Parker Mountain population as a source for augmentation of pronghorn herds and for establishment of new herds in Utah and other western states.
c. Coordinate with UDWR's Outreach Section and work with media organizations to inform and educate the public about pronghorn and pronghorn management in Utah.

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Figure 1. Pronghorn habitat in Utah by big game management unit, Utah 2017.

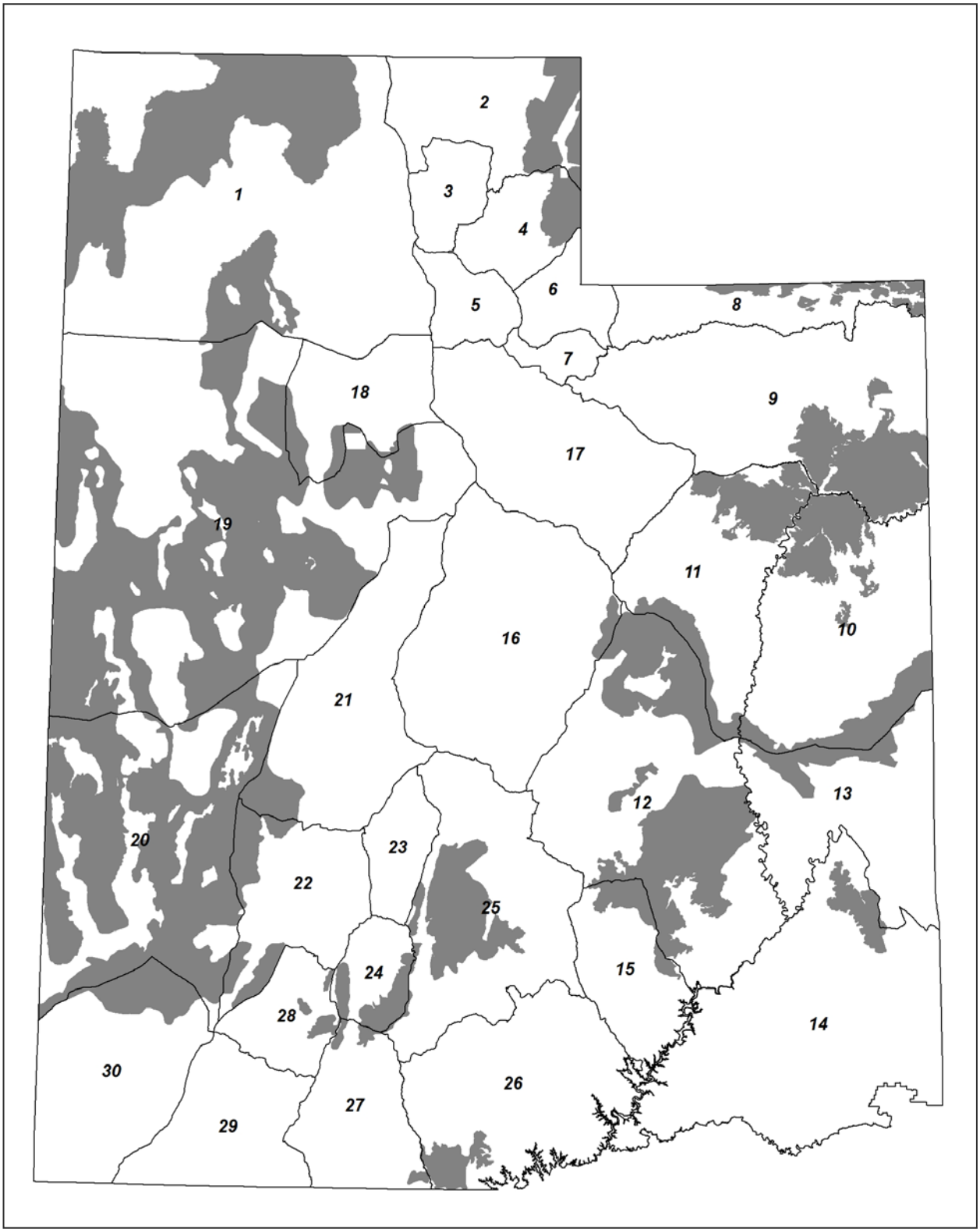

Table 1. Pronghorn population estimates in Utah by management unit for 2008 and 2017.

	Unit	Region	2008 Population Estimate	2017 Population Estimate
1	Box Elder, Promontory	NRO	200	180
1	Box Elder, Puddle Valley	CRO	100	150
1	Box Elder, Snowville	NRO	350	450
1	Box Elder, West	NRO	175	175
2,3,4	Cache/Morgan-South Rich/Ogden	NRO	1,075	800
8	North Slope, Summit	NRO	–	–
8	North Slope, Three Corners/West Daggett	NERO	800	740
9	South Slope, Bonanza/Diamond Mtn	NERO	775	700
9	South Slope, Vernal	NERO	300	380
10	Book Cliffs, Bitter Creek	NERO	175	290
10	Book Cliffs, South	SERO	625	750
11	Nine Mile, Anthro-Myton Bench	NERO	325	750
11	Nine Mile, Range Creek	SERO	300	220
12	San Rafael, Desert	SERO	275	240
12	San Rafael, North	SERO	1,025	1,040
13	La Sal, Potash/South Cisco	SERO	125	530
14	San Juan, Hatch Point	SERO	175	240
19	West Desert, Riverbed	CRO	600	450
19	West Desert, Rush Valley	CRO	350	300
19	West Desert, Snake Valley	CRO	350	250
20	Southwest Desert	SRO	1,675	2,700
21	Fillmore, Oak Creek	SRO	125	800
22	Beaver	SRO	200	550
24,27	Mt. Dutton/Paunsaugunt, Johns Valley	SRO	600	800
25	Plateau, Parker Mtn	SRO	2,400	1,500
26	Kaiparowits	SRO	100	60
28	Panguitch Lake/Zion, North	SRO	175	250
30	Pine Valley	SRO	325	400
Statewide Total			13,700	15,695

Table 2. Statewide pronghorn harvest statistics, Utah 1945–2016.

Year	Buck harvest	Doe harvest	Total harvest	Hunters afield
1945	45	0	45	47
1946	62	0	62	66
1947	85	0	85	96
1948	—	—	—	—
1949	43	0	43	45
1950	26	0	26	35
1951	—	—	—	—
1952	—	—	—	—
1953	—	—	—	—
1954	39	25	64	75
1955	41	15	56	96
1956	47	0	47	102
1957	34	0	34	93
1958	33	0	33	84
1959	74	0	74	142
1960	99	0	99	161
1961	92	0	92	153
1962	74	0	74	122
1963	50	0	50	190
1964	56	0	56	96
1965	51	0	51	81
1966	73	0	73	105
1967	93	0	93	122
1968	114	0	114	151
1969	139	0	139	169
1970	158	0	158	181
1971	174	0	174	218
1972	198	0	198	251
1973	169	0	169	253
1974	183	0	183	254
1975	190	0	190	232
1976	180	0	180	224
1977	208	0	208	242
1978	276	0	276	314
1979	270	0	270	310
1980	280	2	282	310
1981	323	0	323	339
1982	365	35	400	445
1983	425	38	463	515
1984	500	169	669	733
1985	514	151	665	730

Table 2. Statewide pronghorn harvest statistics, Utah 1945–2016 (continued).

Year	Buck harvest	Doe harvest	Total harvest	Hunters afield
1986	491	288	779	859
1987	534	446	980	1054
1988	584	205	789	883
1989	617	373	990	1092
1990	605	647	1252	1347
1991	634	773	1407	1577
1992	720	821	1541	1730
1993	602	947	1549	1873
1994	632	470	1102	1301
1995	605	195	800	1310
1996	535	92	627	704
1997	514	294	808	928
1998	522	581	1103	1195
1999	504	564	1068	1195
2000	503	128	631	791
2001	493	235	728	826
2002	512	166	678	840
2003	345	272	617	717
2004	431	420	851	848
2005	603	518	1121	1129
2006	820	535	1355	1672
2007	813	514	1327	1596
2008	849	845	1694	2077
2009	963	1053	2019	2226
2010	840	573	1413	1850
2011	679	566	1245	1449
2012	686	715	1401	1617
2013	817	798	1615	2150
2014	769	690	1459	2014
2015	775	733	1508	2153
2016	737	480	1217	1574

Table 3. History of pronghorn transplants in Utah 1945–2016.

Year	Capture Source	No. Captured	Unit Number	Unit Name (Release)	No. Released
1945	Daggett County, Utah	6	9	South Slope, Vernal	6
1948	Wyoming	34	1	Box Elder, Promontory	13
			1	Box Elder, Snowville	21
1948	Daggett County, Utah	145	20	Southwest Desert	145
1949	Wyoming	138	9	South Slope, Vernal	138
1949	Daggett County, Utah	67	9	South Slope, Diamond Mountain / Bonanza	32
			12	San Rafael, Desert	35
1964	Gardner, Montana	20	25	Plateau, Parker Mountain	20
1965	Chinook, Montana	109	25	Plateau, Parker Mountain	109
1967	Bison Range, Montana	45	20	Southwest Desert	17
			—	North Logan Pens	28
1970	Sybille, Wyoming	22	26	Kaiparowits	22
1971	Lusk, Wyoming	155	11	Nine Mile, Anthro	71
			14	San Juan, Hatch Point	84
1971	Daggett County, Utah	229	11	Nine Mile, Anthro	30
			14	San Juan, Hatch Point	88
			26	Kaiparowits	105
			—	North Logan Pens	6
1972	North Logan Pens, Utah	8	1	Box Elder, Snowville	8
1972	Daggett County, Utah	150	12	San Rafael, North	150
1972	North Logan Pens, Utah	7	12	San Rafael, North	7
1973	North Logan Pens, Utah	7	1	Box Elder, Snowville	7
1975	Parker Mountain, Utah	145	1	Box Elder, Puddle Valley	70
			24	Mt. Dutton	75
1979	Parker Mountain, Utah	77	24	Mt. Dutton	77
1979	Parker Mountain, Utah	72	1	Box Elder, Puddle Valley	72
1981	Snowville, Utah	31	1	Box Elder, Pilot Mountain	31
1982	Parker Mountain, Utah	95	1	Box Elder, Pilot Mountain	55
			11	Nine Mile, Range Creek	40
1982	Parker Mountain, Utah	222	1	Box Elder, Pilot Mountain	145
			10	Book Cliffs, Bitter Creek	22
			—	Hogle Zoo, Utah	6
			—	Arizona	49
1982	Snowville, Utah	149	1	Box Elder, Pilot Mountain	24
			11	Nine Mile, Range Creek	125
1983	Maybell, Colorado	340	10	Book Cliffs, Bitter Creek	114
			11	Nine Mile, Anthro	136
1983	Summitt County, Utah	277	—	Antelope Island	27
1983	Parker Mountain, Utah	237	9	South Slope, Vernal	42
			10	Book Cliffs, South (Cisco)	150
			20	Southwest Desert	45
1984	Snowville, Utah	149	—	Nevada	149
1984	Parker Mountain, Utah	320	1	Box Elder, Puddle Valley	74
			9	South Slope, Vernal	45
			10	Book Cliffs, Bitter Creek	49
			12	San Rafael, Desert	151

Table 3. History of pronghorn transplants in Utah, 1945–2016 (continued).

Year	Capture Source	No. Captured	Unit Number	Unit Name (Release)	No. Released
1985	Parker Mountain, Utah	301	10	Book Cliffs, Bitter Creek	144
			12	San Rafael, Desert	157
1986	Parker Mountain, Utah	319	14	San Juan, Hatch Point	150
			19	West Desert, Rush Valley	75
			28	Panguitch Lake	94
1987	Parker Mountain, Utah	291	9	South Slope, Vernal	80
			19	West Desert, Rush Valley	68
			20	Southwest Desert	74
			28	Panguitch Lake	57
			—	North Logan Pens	12
1990	Parker Mountain, Utah	244	—	Nevada	244
1997	Parker Mountain, Utah	187	—	————	187
1998	Parker Mountain, Utah	336	—	————	336
2000	Parker Mountain, Utah	104	21	Fillmore, Black Rock Desert	102
2001	Parker Mountain, Utah	160	21	Fillmore, Black Rock Desert	23
			—	————	137
2003	Parker Mountain, Utah	339	26	Kaiparowits	200
			21	Fillmore, Black Rock Desert	39
			—	Antelope Island	100
2004	Parker Mountain, Utah	463	26	Kaiparowits	85
			28	Panguitch Lake	26
			—	Arizona	39
			—	Idaho	205
			—	Nevada	98
2005	Parker Mountain, Utah	369	10	Book Cliffs, Bitter Creek	43
			11	Nine Mile, Anthro	53
			11	Nine Mile, Range Creek	44
			12	San Rafael, North	24
			12	San Rafael, Desert	24
			26	Kaiparowits	75
			28	Panguitch Lake	31
			—	Ute Tribe	33
			—	Arizona	38
2006	Parker Mountain, Utah	179	10	Book Cliffs, Bitter Creek	39
			11	Nine Mile, Anthro	35
			11	Nine Mile, Range Creek	25
			12	San Rafael, Desert	26
			12	San Rafael, North	48
2007	Parker Mountain, Utah	197	1	Box Elder, Puddle Valley	50
			10	Book Cliffs, Bitter Creek	20
			11	Nine Mile, Anthro	27
			19	West Desert, Snake Valley	100

Table 3. History of pronghorn transplants, Utah 1945–2016 (continued).

Year	Capture Source	No. Captured	Unit Number	Unit Name (Release)	No. Released
2008	Parker Mountain, Utah	278	10	Book Cliffs, Bitter Creek	49
			11	Nine Mile, Anthro	50
			11	Nine Mile, Range Creek	23
			28	Panguitch Lake	50
			—	Arizona	104
2009	Parker Mountain, Utah	296	19	West Desert, Snake Valley	173
			26	Kaiparowits	23
			10	Book Cliffs, Bitter Creek	50
			11	Nine Mile, Anthro	50
2014	Parker Mountain, Utah	237	10	Book Cliffs, Bitter Creek	51
			11	Nine Mile, Anthro	50
			14	San Juan	74
			19	West Desert, Snake Valley	62

Table 4. Potential augmentation or reintroduction sites for future pronghorn releases in Utah, 2017–2027.[1]

Region	Type of Transplant	Unit		Location
Northern	——	——	———	———
Northeastern	Augmentation	9	South Slope, Vernal	Asphalt Ridge, Halfway Hallow, and Brennan Bottoms
	Augmentation	9	South Slope, Bonanza/Diamond Mtn	Coyote Basin, Snake John, and Kennedy Wash
	Augmentation	10	Book Cliffs, Bitter Creek	Agency Draw, East Bench, Middle Ridge, and Winter Ridge
	Augmentation	11	Nine Mile, Anthro-Myton Bench	Nutter's Ridge, Chokecherry, Little Desert, and Wire Fence
Central	Augmentation	1	Box Elder, Puddle Valley	Marblehead and North Grassy Mtn
	Augmentation	19	West Desert, Riverbed	Simpsons Springs South to Table Mtn
	Augmentation	19	West Desert, Snake Valley	Confusion Range and Honeycomb Hills
Southeastern	Augmentation	11	Nine Mile, Range Creek	West Tavaputs Plateau
	Augmentation	12	San Rafael, North	Furniture Draw, South Sand Bench
	Reintroduction	12	San Rafael, North	Sage Bench/Sinkhole Flat/Jackass Flat
	Augmentation	12	San Rafael, Desert	Indian Flat, Greasewood Draw, Cottonwood Ridge, Goblin Valley
	Augmentation	13	La Sal, Potash/South Cisco	Big Flat by Dead Horse Point
	Augmentation	14	San Juan, Hatch Point	Hatch Point
Southern	Augmentation	26	Kaiparowits	Hole in the Rock, Clark Bench/Big Water

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

Table 5. Drawing odds for limited entry permits to hunt pronghorn in Utah, 1998–2017.

Year	Residents			Nonresidents		
	Applicants	Permits	Odds	Applicants	Permits	Odds
1998	2832	468	1 in 6.1	175	35	1 in 5.0
1999	3083	508	1 in 6.1	222	42	1 in 5.3
2000	3180	496	1 in 6.4	254	40	1 in 6.4
2001	4057	493	1 in 8.2	356	41	1 in 8.7
2002	4479	471	1 in 9.5	369	40	1 in 9.2
2003	4974	377	1 in 13.2	426	33	1 in 12.9
2004	5000	402	1 in 12.4	431	29	1 in 14.9
2005	5697	566	1 in 10.1	489	47	1 in 10.4
2006	5737	806	1 in 7.1	537	74	1 in 7.3
2007	5856	790	1 in 7.4	606	61	1 in 9.9
2008	5315	879	1 in 6.0	471	75	1 in 6.3
2009	5546	962	1 in 5.8	2230	81	1 in 27.5
2010	5854	930	1 in 6.3	2343	83	1 in 28.2
2011	5450	633	1 in 8.6	2280	47	1 in 48.5
2012	5650	630	1 in 9.0	2419	63	1 in 38.4
2013	5965	792	1 in 7.5	2678	82	1 in 32.7
2014	6217	736	1 in 8.4	2905	72	1 in 40.3
2015	6274	758	1 in 8.3	3152	76	1 in 41.5
2016	6486	731	1 in 8.9	3387	71	1 in 47.7
2017	7148	819	1 in 8.7	4039	75	1 in 53.9

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
MICHAL D. FOWLKS
Interim Division Director

MEMORANDUM

Date: October 10, 2017

To: Wildlife Board and Regional Advisory Council Members

From: Kent Hersey, Big Game Projects Coordinator

Subject: Statewide Moose Management Plan

The current statewide management plan for moose was approved in 2009 and is set to expire in December 2017. The Utah Division of Wildlife Resources (UDWR) has drafted a new plan for moose in collaboration with interested stakeholders.

Below is a summary of the major updates to the statewide moose management plan.

1) This plan is being proposed as a 10-year plan that will be subject to review in 2027.
2) All background information, research findings, and issues and concerns have been updated to reflect current scientific understanding of moose and moose needs.
3) Research indicates that density dependence and habitat limitations are a concern for moose in Utah. As such, we propose to be more aggressive with antlerless harvest to control or maintain populations at desired densities.
4) We recommend using transplants to bolster existing populations or establish new populations in suitable habitat. Transplants will also serve to reduce densities in source populations where needed.
5) We recommend managing for a 3-year average age of harvested bull between 3.75–4.25 years old on all units. The previous plan called for managing to a 4.0–6.0 age objective. In Utah, moose reach their maximum antler growth potential when they are 5-years old. Managing to this new objective will increase hunting opportunity for moose in Utah, while maintaining a sufficient numbers of quality bulls in each population.

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UTAH MOOSE
STATEWIDE MANAGEMENT PLAN

UTAH DIVISION OF WILDLIFE RESOURCES
DEPARTMENT OF NATURAL RESOURCES

UTAH DIVISION OF WILDLIFE RESOURCES
STATEWIDE MANAGEMENT PLAN FOR MOOSE

I. PURPOSE OF THE PLAN

A. General

This document is the statewide management plan for moose in Utah. This plan will provide overall guidance and direction to Utah's moose management program. This plan assesses current information on moose; identifies issues and concerns relating to moose management in Utah; and establishes goals, objectives, and strategies for future moose management. This plan will be used to provide overall guidance and direction for management plans on individual moose units throughout the state.

B. Dates Covered

This moose plan will be in effect upon approval of the Wildlife Board (expected date of approval: November 30, 2017) and subject to review within 10 years.

II. SPECIES ASSESSMENT

A. Natural History

Moose (*Alces alces*) are the largest member of the deer family with 4 subspecies recognized in North America: Shiras moose (*A. a. shirasi*), Eastern moose (*A. a. americana*), Northwestern moose (*A. a. andersoni*), and Alaskan moose (*A. a. gigas*) (Bubenik 2007). Shiras is the smallest subspecies and the only one to occur in Utah and the western United States. Shiras bulls weigh considerably less than other moose but can still reach 800 pounds. Moose produce the largest antlers of any living mammal and use the antlers in dominance displays and fighting during the rut or breeding season. In Utah, the rut begins in early September and lasts for several weeks, peaking in late September. Both cows and bulls vocalize and are very aggressive during the breeding season. Gestation for moose is approximately eight months and calving peaks in late May. Cows usually give birth to one or two young with one calf being most common in Utah. Calves grow rapidly and achieve sufficient size by five months of age to endure deep snow and cold weather conditions.

Historical records indicate moose were not present in Utah prior to the early 1900's (Barnes 1927). Moose naturally immigrated into Utah from Idaho and Wyoming, and the first recorded sighting of a moose in Utah was in 1906 or 1907 at the head of Spanish Fork Canyon. The next reported sighting was in 1918 in the Bear River Drainage of the Uinta Mountains. Sparse reports over the next few decades were mainly from the north slope of the Uintas where a population gradually established itself. It was not until 1947 that it was determined a resident herd existed on the North Slope.

The first aerial survey specifically for moose was conducted along the north slope of the Uintas in the spring of 1957 where 59 moose were counted. Moose populations continued to expand on

the North Slope and observations in other areas of northern Utah began to increase. Moose numbers have gradually increased since then and have expanded throughout the mountainous areas of the northern half of Utah (Figure 1, Figure 2).

B. Management

1. DWR Regulatory Authority

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

The Utah Division of Wildlife Resources is charged with managing the state's wildlife resources and assuring the future of protected wildlife for its intrinsic, scientific, educational, and recreational values. Protected wildlife species are defined in code by the Utah Legislature.

2. Past and Current Management

Aerial Surveys

DWR began conducting winter aerial surveys to obtain estimates of minimum abundances of moose beginning in 1957. Surveys were first conducted with fixed-wing aircraft (1957–1962) and later with helicopters (1963–present). Management units were initially surveyed every year, but now are surveyed on a rotational schedule in which DWR attempts to survey units once every 3 years dependent on adequate snow cover. During surveys, all suitable habitat within each management unit is surveyed according to expert opinion of biologists and routes are flown as consistently as possible across years with moose classified by sex and age-class (calf or adult). Data from aerial surveys are used to estimate population size and distribution, herd productivity, and bull:cow ratios.

Harvest

The first legal hunting season for moose in Utah was held in 1958, and moose permits have been available every year since that time (Figure 3, Table 1). Harvest is carefully monitored to assure older age class bulls are maintained in populations and balanced sex ratios are sustained. Data on success rates and antler size have been collected since hunts began. Initial data was collected using mail questionnaires and telephone surveys, but in 2004, the Division implemented mandatory online harvest reporting for bull-moose hunters. Antlerless moose harvest data is collected using a combination of telephone and internet-based surveys. Between 1958 and 2016, 7,552 (6,287 bulls and 1,265 antlerless) moose were legally harvested in Utah by 8,218 hunters. The mean success rate for moose hunters in Utah is 92%, with bull hunter success tending to be higher than cow hunter success. Compared to other western states, Utah has the highest bull hunter success averaging 96%, whereas other states average between 74% and 92% (Nadeau et

al. 2017).

DWR attempts to balance opportunity to hunt moose with the ability to harvest a large-antlered bull. This balance is accomplished by managing for an average age of harvested bulls. The higher the average age, the greater the likelihood of a hunter harvesting a large-antlered bull and the higher the success rate, but fewer permits can be issued. Utah has age data from 1986 to present. In Utah, moose reach their maximum antler spread around age 5 (Figure 4). From 1986 to 2016, harvested bulls averaged 4.5 years old with a low of 3.6 in 1988 and a high of 5.0 in 2006. In 2016, harvested bulls averaged 4.4 years old and the latest 3-year average (2014–2016) was 4.5 years old (Table 2).

In Utah, there is very high demand for bull-moose hunting permits (Table 3). Hunting permits for Shiras moose are considered one of the most difficult permits to obtain of any North American big game species. For Utah residents, applications currently exceed available permits by more than 220:1, and moose are the most difficult permits to draw in the state. The odds of drawing a permit for nonresidents are even lower at 1,644:1 in 2017. There is also a tremendous demand for antlerless moose permits in Utah. Antlerless moose are also managed using a bonus point system with a 5-year waiting period for hunters who successfully draw a permit. Due to recent population declines, few antlerless permits have been issued since 2011. Nonetheless, several thousand hunters each year have been applying for antlerless preference points in hopes of obtaining a permit when moose populations recover. In 2017, the odds of obtaining an antlerless moose permit were 167:1.

Transplants

Utah has transplanted moose since 1973. This program was initiated to encourage expansion of moose populations into other areas of the state. Moose have been relocated from northern Utah to the Manti, Fishlake, Currant Creek, and Book Cliffs management units with mixed success (Table 4). Although a viable population has been established in Currant Creek, populations failed to thrive in the other release areas. Unfortunately, those transplants were not monitored sufficiently to fully understand why new populations were not successfully established. Poaching, predation from cougars, lack of adequate riparian habitats, excessive summer temperatures, and an insufficient starting number of animals have all been hypothesized, but the true reason remains unknown. In more recent years, moose from Utah have been relocated to more southern latitudes in Colorado and on the Tavaputs Plateau with better results (Duckett 2009, UDWR unpublished data). These recent successes demonstrate that there may be potential for further expansion of moose populations in Utah, and it is essential that future transplants be closely monitored to provide better information on success or failure and reasons for the outcome. All transplants will be conducted in accordance with Utah Code 23-14-21, and a list of potential transplant sites is found in Table 5.

In addition to organized transplants, nuisance moose that wander out of the mountains and into populated areas are also relocated. DWR relocates these animals because of public safety concerns. Most nuisance moose occur along the Wasatch Front in the spring and summer months when younger moose are dispersing. Additionally, depending on winter severity, moose may wander into towns during the winter months while they are searching for areas with less

snow. Some of those moose have been moved to areas throughout Utah to help bolster previously transplanted populations or to start new populations. More commonly, nuisance moose have simply been relocated to suitable habitat within the same or nearby units to move the animals away from cities and towns.

C. Population Status

Moose are well established in the northern half of Utah with the majority existing on 9 management units with smaller populations occurring on 4 adjacent units (Figure 1). The current (winter 2017) statewide population in Utah is estimated at 2,650 animals. Since establishment in the late 1940's, moose populations trended upward for 4 decades in Utah with an average annual growth rate (λ) of 1.12 from 1957 to 1991. From 1992 to 1996 moose populations declined likely due to above average mortality during winter 1992–1993 and moose populations exceeding carrying capacity on some management units. During the late 1990's and early 2000's, moose population again expanded and reached a record population size in 2005 of an estimated 4,000 moose. Since 2005, the moose population has again declined and reached an estimated population low of 2,615 moose in 2013. Unlike in the mid-1990's, when populations quickly rebounded following the crash, moose numbers have held steady between 2,600 and 2,700 animals for the past 6 years mostly in the absence of antlerless harvest.

On the management unit level, population trends vary considerably with some herds increasing rapidly whereas others are stable or declining. Some herds, especially in the northern part of the state, may exceed carrying capacity and harvest has been used to stabilize or decrease those populations to prevent habitat degradation. Interestingly, moose continue to naturally expand onto the Nine Mile Unit in southeastern Utah, and onto the Box Elder Unit in extreme northwestern Utah. The Box Elder expansion is likely due to animals migrating from southern Idaho. Additionally, some remnant populations still exist on the Manti, Mount Nebo, and Fishlake units, but little to no growth is occurring, and it is unlikely that they will grow to huntable populations in the near future without assistance.

D. Habitat

The primary limiting factor for moose in Utah and across their range is the availability of suitable habitat. Moose are primarily browsers and depend on shrubs and young deciduous trees for food during much of the year. In more northern climes, moose are often associated with river bottoms, ponds, and lakes with an abundance of shrubby and aquatic vegetation. Although moose in Utah are also associated with riparian habitat types, particularly on the north slope of the Uintas, they are not exclusively tied to them. Moose have done well in drier habitats in northern Utah which are dominated by mountain mahogany (*Cercocarpus* spp.), Gambel's oak (*Quercus gambelii*), serviceberry (*Amelanchier utahensis*), quaking aspen (*Populus tremuloides*), and burned over coniferous forests. Moose use thick stands of conifer as shelter in winter and to help stay cool during summer.

Geist (1971) recognized two types of moose habitat, permanent and transient. Permanent habitats are those that persist through time and do not succeed to other vegetative communities (Peek 2007). Examples of permanent habitat include riparian and high elevation shrub

communities. Annual flooding, avalanches, or timberline conditions help maintain those more permanent moose habitat types. Transient habitat is more common and is usually associated with forest fires and timber harvest which remove coniferous trees and reverts the habitat to early seral stages. Throughout much of North America, moose are associated with short-lived, subclimax plant communities that follow in the wake of forest fires (Geist 1971). Habitat improvement projects which favor early seral stages and increased shrub growth can benefit moose. Fire can also be used to improve moose habitat.

Winter weather and snow depth is not thought to be a limiting factor to moose in Utah, although increased mortality and decreased calf recruitment have been noted during severe winters (e.g., 2016–2017, UDWR unpublished data). Moose are well adapted, as a result of their long legs and heavy black fur, to tolerate deep snow and cold weather. In Utah, moose generally live at higher elevations throughout the year, although some moose are observed at lower elevation habitats even in summer. Interestingly, analysis of aerial count data suggests that light winters with minimal spring snow cover may have a greater impact on moose than harsh winters (Ruprecht 2016). This pattern may be the result of increased survival of ticks during winters with light snow cover followed by high numbers of winter ticks on moose, resulting in increased moose mortality and decreased calf production.

E. Research

Utah's moose population has been the subject of several research projects. Most research has taken place on the north slope of the Uinta Mountains, where studies were conducted to determine the distribution and movements of moose, food habits and key browse species for moose, the effects of moose utilization of various browse species, and the overall habitat quality and carrying capacity of this area for moose (Van Wormer 1967, Wilson 1971, Babcock 1977, Babcock 1981). Because of population declines in the late 2000's, DWR in conjunction with Utah State University initiated a large scale capture and collaring effort on the North Slope and Wasatch units in January 2013. The purpose of this study was to collect data on demographic parameters and identify potential limiting factors for Utah's moose populations. Results from this study showed a significant relationship between moose body condition and the probability of pregnancy, calving, and recruiting a calf (Ruprecth et al. 2016), all of which provide further evidence for the need to provide high quality habitat and maintain moose populations at appropriate numbers. Due to continued stagnant moose populations, this study was extended in 2016 with the addition of satellite GPS collars to get an improved understanding of timing and causes of mortality. This study will also improve our understanding of needed harvest levels to prevent habitat degradation and future population declines.

III. ISSUES AND CONCERNS

A. Habitat Degradation

The single biggest influence on moose populations in Utah is the quantity and quality of available habitat. Moose in Utah are at the southern extent of their range and, as such, may reside in less quality habitat than moose in the core of their range (Peek 1974). Indeed, Ruprecht et al. (2016) found that moose in Utah had lower ingesta-free body fat, pregnancy rates, twinning

rates, and fecundity rates than moose at higher latitudes, which could indicate suboptimal moose habitat.

In Utah, moose populations thrived when they first became established, but have experienced 2 large-scale population crashes (one in the mid-1990s and one in the late-2000s) when numbers exceeded 3,000–3,500 counted moose (Figure 1). Additionally, calf production has declined since moose have become established in Utah (Figure 5) and twinning rates from June 2013 to June 2017 are very low (x=1.7%, range = 0%–3.2%, UDWR unpublished data). Those data likely indicate that resources are limiting for moose in Utah, and habitat loss or degradation are of major concern.

Habitat can be degraded, fragmented, or lost to a variety of causes including human development and plant succession. Reductions in quality or quantity of habitat can result in corresponding population declines. As Utah's human population continues to grow, moose habitat will continue to be lost. Conversion of moose habitat into highways, summer homes, ski resorts, or other developments, results in a permanent loss of habitat. Moose habitat can also be lost or degraded due to plant succession. As deciduous forests are converted to coniferous forests, moose habitat is altered and provides less forage. Forest fires and logging can help remove coniferous trees and return the habitat to early successional stages which are beneficial for moose. Additionally, it is crucial to manage moose numbers at appropriate densities to prevent habitat damage and subsequent population declines. If habitats are damaged, it can take years or decades to recover and result in long-term population declines.

B. Disease/Parasites

Identifying, understanding, and monitoring disease is important for moose management in Utah. Moose are susceptible to a wide variety of viral, bacterial, and parasitic diseases. Recent collar data has shown that adult and juvenile moose mortalities are prevalent during the late winter and early spring with the majority of these mortalities attributed to malnutrition, starvation, and high tick loads. Past reports of diseases in Utah moose have included symptoms such as opaque corneas or blindness, emaciation, excessive salivation, bloody feces, and nasal mucous discharge, however definitive diagnoses were not obtained in these cases (Wolfe et al. 2010). Parasites and infectious diseases considered a concern to Utah moose populations include winter tick (*Dermacentor albipictus*) infestations, elaeophorosis, infectious kerato-conjunctivitis (IKC), chronic wasting disease (CWD), and hemorrhagic diseases such as bluetongue (BTV), epizootic hemorrhagic disease (EHD), adenovirus, malignant catarrhal fever (MCF), and meningeal worms (*Parelaphostrongylus tenuis*).

Infestation with winter ticks and resulting anemia, alopecia, and emaciation, is considered a significant cause of mortality in moose populations in North America (Samuel 2004, Wünschmann et al. 2015). High tick loads cause significant blood loss, increased grooming, hair loss, subsequent heat loss, and early depletion of energy reserves (Mooring and Samuel 1999, Samuel 2004). Significant tick infestations have been observed in Utah moose (Wolfe et al. 2010), and high levels of infestation was associated with increased probability of late winter mortality and a decreased probability of having a calf in spring (Ruprecht 2016).

Nutritional stress and mineral deficiencies have been reported in moose from Wyoming, Minnesota, Alaska, and Sweden (O'Hara et al. 2001, Custer et al. 2004, Frank 2004, Murray et al. 2006, Becker et al. 2010) and have also been detected in moose in Utah. Inadequate winter range conditions and high ectoparasite loads may be contributing factors, but the effect of those factors on moose population performance in Utah warrants further investigation.

The arterial worm *Elaeophora schneideri* is a parasite that mainly resides in the carotid and maxillary arteries of wild and domestic mammals. The parasite is transmitted from animal to animal with horse flies (Williams and Barker 2001). Microfilaria, larvae, and adult nematodes cause inflammation and potentially complete occlusion of the blood vessel, leading to ischemic necrosis of the tissue that the blood vessels supply. Clinical signs can include cropping of ears, necrosis of the muzzle, brain damage, traveling in circles, and blindness (Williams and Barker 2001). In Utah, *E. schneideri* nematodes have frequently been detected in the carotid arteries of moose during necropsies of both sick animals and hunter-harvested moose, but the impact on the Utah moose population remains largely unknown.

IKC or "pinkeye" is a disease of cattle and small ruminants, caused by eye infection with bacteria such as *Moraxella*, *Chlamydia*, and *Mycoplasma* sp (Brown et al. 1998). The bacteria are spread from animal to animal by flies, and mule deer, bighorn sheep, elk, and moose can become infected (Taylor et al. 1996, Dubay et al. 2000, Jansen et al. 2006). Infections are most common in the late fall and early winter, and clinical signs include corneal opacity, ulceration, and potentially blindness (Dubay et al. 2000). Clinical IKC has been observed in Utah moose, deer, bighorn sheep, and elk populations.

Chronic wasting disease was first documented in Utah in late 2002 and has now been detected in deer management units 8, 9, 13, 14, and 16. Chronic wasting disease can infect moose (Baeten et al. 2007), but to date, no infected moose have been detected in Utah. Chronic wasting disease continues to be of high concern for cervids in Utah, and the highest risk for CWD infection in moose is currently on the North and South Slope of the Uinta Mountains, where CWD infected deer and elk have been detected.

Moose are also susceptible to a variety of hemorrhagic diseases including bluetongue, epizootic hemorrhagic disease, adenovirus, and malignant catarrhal fever. Overall, the risk of population level impacts of hemorrhagic diseases on moose in Utah is low, but these diseases could be associated with individual mortalities. Natural mortalities due to EHD and BTV have not been confirmed in Utah moose, but a recent serological survey for BTV and EHD in Utah moose showed that 60% (15/25) of moose from the North Slope, and 4% (1/25) of moose from the Wasatch Mountains were seropositive for BTV, and 4% (1/25) from the North Slope and 0% (0/25) of moose from the Wasatch were seropositive for EHD. Adenovirus has not been detected in Utah's cervids to date, but has been detected in cervids in surrounding western states and must be considered as a differential diagnosis if mortalities due to hemorrhagic disease are detected. Malignant catarrhal fever is a highly fatal hemorrhagic disease that has been diagnosed in deer in northern Utah, but clinical cases of MCF have not been confirmed in Utah moose, although they are considered susceptible to infection.

Lastly, although not presently found in Utah, *P. tenuis*, or meningeal worms, has the potential to have a significant negative influence for Utah moose if introduced. The parasite is carried asymptomatically by white-tailed deer, but causes severe neurologic infections in moose, elk, and caribou. Clinical signs include aimless wandering, blindness, ataxia, lameness, circling, and paralysis. The disease is a significant cause of mortalities in moose in the northeastern US (Lankester 2010) and is suspected to have contributed to the decline of moose in areas with significant white-tailed deer populations (Lenarz 2009, Lankester 2010).

C. Poaching

Poaching of moose has been a significant problem in Utah. Many moose have been killed intentionally or unintentionally during the deer and elk hunting seasons. Poaching may have been the main cause of the failure of the original moose transplant on the Manti Unit since more moose were documented to have been poached over a several year period than were originally released on the unit (UDWR, unpublished data). The Northern Region has also experienced extensive poaching of moose. Publication of high profile moose poaching cases including assessed fines has contributed to fewer moose poaching cases. An extensive public information campaign and signing effort has helped reduce the number of moose kills due to misidentification.

D. Human Interaction

Moose are generally tolerant and less afraid of humans than other wild ungulates, which results in frequent interaction. During spring, summer, and harsh winters, moose frequently wander from the mountains into the valleys where they interact with people. As human populations continue to grow in Utah, moose-human interaction will become more common. Although nuisance moose rarely cause serious problems, the potential exists, and they need to be captured and relocated. Additionally, much work is needed to educate people who come in contact with moose about the potential dangers these animals can pose.

Auto collisions with moose are a major problem in some parts of North America. A survey of 16 US states and Canadian provinces indicated that nearly 3,000 moose/vehicle accidents occur annually, and that is considered to be a minimum estimate (Childs 2007). Although moose exhibit some avoidance of roads, moose-vehicle collisions are common and very dangerous for vehicle occupants. Since 2010, Utah has averaged 27 moose roadkills reported during road surveys by state agencies annually. The cost of one moose-vehicle collision is estimated to be $30,773 (Hjuiser 2008), which translates into an annual cost of almost $1 million in Utah. Roadkills occur throughout the year with the largest peak occurring in June when yearlings disperse. The majority of roadkills in Utah occur in 5 locations: US-40 near Jordanelle Reservoir, US-40 in Daniel's Canyon, I-80 in Parley's Canyon, I-80 near Kimball Junction, and I-80 near Emory. In these areas, Utah Department of Transportation has installed some highway fencing and crossing structures have been constructed with some success. These areas and other high-risk sites need to continue to be monitored, and, if needed, further action should be taken to reduce the risk of property damage and serious personal injury.

E. Competition

Moose coexist with other wild ungulates and domestic livestock across much of their range in Utah. Moose are found in the same areas as mule deer, elk, cattle, sheep, and to a lesser extent bighorn sheep, mountain goats, and pronghorn. The reason similar species can coexist is best summarized by Boer (2007). "Resource partitioning mechanisms facilitate coexistence of sympatric species of large mammals; they may take the form of spatial or temporal segregation, species-specific preferences for forage plants and plant parts, and different feeding heights." Although there is overlap in use areas, moose utilize a forage resource which is largely unavailable to other ungulates. Moose eat primarily browse and to a lesser extent grass and forbs. Moose also feed at a height which is well above the ability of other ungulates to reach, and moose live in a deep snow environment during critical winter months where few other ungulates can survive. Nonetheless, interspecies competition between moose and other ungulates undoubtedly occurs particularly when moose are using nontypical habitat more closely resembling habitats used by deer and elk. Habitats need to be closely monitored and populations maintained at appropriate levels to ensure long-term habitat damage that could negatively impact all species does not occur.

F. Predators

In Utah, black bears and mountain lions are the principal predators that have the potential to kill moose. Despite their large size, adult moose are killed by mountain lions. In 1995 on the Manti Unit, mountain lions killed 57% (4/7) of radio-collared moose, and 22% (2/9) of collared moose on the Fishlake Unit were killed by cougars (UDWR, unpublished data). However, those moose were recent transplants and may have been more susceptible to cougar predation. Of 120 collared adult cow moose on the North Slope and Wasatch units from 2013 to 2016, 0 of 36 mortalities were assigned to cougars. Interestingly, in winter 2017, 2 of 11 moose calves collared as 7-month olds on the Wasatch Unit were killed by cougars in late winter (3/28 and 4/19, respectively). This study is the first to collar moose calves in Utah so it remains unknown how common of an occurrence cougar predation is on moose calves.

Black bears are efficient predators of newborn moose calves. Black bears have been reported to kill 2–50% of the calves in moose populations (Ballard and Van Ballenberghe 2007); however, black bear densities in Utah are much lower than those in the previous study. Furthermore, Heward et al. (2004) examined black bear scats (n=179) from the Hobble Creek area of the Wasatch Mountains Management Unit and found no evidence of moose remains in any samples. Although predation can slow moose population growth or have an impact on recently transplanted populations, it is likely not a major limiting factor on a statewide basis. Other factors, such as habitat degradation and parasites, are likely more important in determining the size of the overall population.

G. Movements and Migrations

Currently, we have limited information on the movement patterns of moose. Much of the research that is available comes from studies of populations in Scandinavia and other parts of North America. Migration, dispersal, and activity near roads are key aspects of moose

movements. Migratory movements vary greatly among populations and individuals within populations (Hundertmark 2007). Some populations are completely migratory; however, most consist of both migrants and residents (Selier et al. 2003). Migration appears to be triggered when snow depths exceed 40 cm (16 in), and snow depths greater than 70 cm (27 in) cause moose to reduce their movements significantly (Sweanor and Sandegren 1989). Documented migration distances range from 2 km (1.2 mi) to over 100 km (60 mi), with individuals in mountainous terrain generally migrating farther than those that occupy habitats that are relatively flat (Hundertmark 2007).

Roads can be a barrier to the movements of moose (Bartzke et al. 2015). In Norway, moose avoided areas within 500 m (547 yd) of highways and forest roads (Dussault et al. 2007). Additionally, the construction of a new highway in Sweden created a barrier to moose movements, even with the installation of wildlife crossings to facilitate movement (Selier et al. 2003). The importance of moose vehicle collisions has been highlighted already in the human interaction section of this plan.

The limited research that is available on moose dispersal indicates that most individuals that disperse are juvenile males (Hundertmark 2007). The percentage of individuals that disperse varies from 1% to 30% and dispersal distances (1–4 km, 0.6–2.5 mi) are relatively short (Gasaway et al. 1985, Ballard et al. 1991). In Utah, there is currently a study underway in collaboration with Utah State University to evaluate juvenile dispersal in the North Slope and Wasatch moose populations.

In Utah, our ability to manage moose and conserve their habitats could be improved by focusing monitoring and research on the percentage of animals within each population that are migratory, the timing of migration, movement corridors connecting summer and winter ranges, and identifying potential movement barriers for moose.

H. Native Status

Although not present at settlement times, moose immigrated into Utah of their own accord and are considered a native species by UDWR.

IV. CONCLUSION

Moose are a unique and valuable part of our wildlife heritage in Utah. Observing a moose in the wild is an exciting experience for most people, and hunting moose is a unique opportunity for a limited number of hunters. High quality viewing and hunting opportunities should be expanded in the state where possible.

Moose are relatively recent arrivals in our state with no record of moose prior to the twentieth century. They have become well established in the mountainous areas of the northern half of Utah with a statewide population of approximately 2,600 animals in winter 2017. Moose need to be carefully managed in Utah to ensure herds are productive and balanced with available habitat. In the past 25 years, there have been 2 population crashes indicating that moose in Utah are susceptible to habitat limitation and cannot be allowed to grow unchecked. Moose require

proactive management and need to be managed at appropriate densities to maintain healthy populations and prevent future declines in Utah moose populations.

VI. STATEWIDE MANAGEMENT GOALS AND OBJECTIVES

A. Population Management Goal: Achieve optimum populations of moose in all suitable habitat within the state.

Objective 1: Increase moose populations within the state as conditions allow and maintain populations at objectives to prevent population declines.

Strategies:

a. Update management plans for individual units including population goals and objectives as needed.
b. Survey all moose herd units by helicopter every 3 years to monitor population size and herd composition.
c. Use population and/or sightability models to determine the relationship between population surveys and population size.
d. Recommend antlerless harvest to control and maintain populations at desired densities and prevent population declines.
e. Transplant moose to bolster existing populations and establish new populations in all suitable habitat in Utah. Transplant sites are listed in Table 5.
f. Continue research projects to determine limiting factors to moose populations in Utah.
g. If predators are determined to be a limiting factor for moose, initiate predator management as specified in predator management plans.
h. Identify locations of high moose-vehicle collisions and construct sufficient wildlife crossing structures or other mitigation options.
i. Support law enforcement efforts to reduce illegal take of moose.

B. Habitat Management Goal: Assure sufficient habitat is available to sustain healthy and productive moose populations.

Objective: Maintain or enhance the quantity and quality of moose habitat to allow herds to reach population objectives.

Strategies:

a. Identify crucial moose habitats (including calving, winter, summer, and year-long) and work with public and private land managers to protect and enhance those areas.
b. Assist land management agencies in monitoring the condition and trend of moose habitats.
c. Work with public land management agencies to minimize, and where possible, mitigate loss or degradation of moose habitat.
d. As part of the Utah Migration Initiative, identify migration routes and corridors along with any barriers (e.g., fences, highways) that impede moose. Modify or mitigate any barriers that impede movement of moose.
e. Initiate prescribed burns, timber harvests, and other vegetative treatment

projects to improve moose habitat lost to ecological succession or human impacts.

f. Under the Utah Watershed Restoration Initiative, design, implement, and monitor the effectiveness of habitat improvement projects to benefit moose and other wildlife.
g. Maintain populations at appropriate densities to maintain habitat quality.
h. Support the establishment of multi-agency OHV travel plans developed on a county level or management unit level, and support ongoing education and enforcement efforts to reduce illegal OHV use to prevent resource damage and to protect crucial moose habitats.

C. Recreation Goal: Provide high-quality opportunities for hunting and viewing of moose.

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

Strategies:

a. Manage for a 3-year average age of harvested bulls of 3.75–4.25 on all units to ensure sufficient numbers of older age class bulls, while maximizing hunter opportunity.
b. Use subunits to maximize hunting opportunities and distribute hunters.
c. Recommend long hunting seasons to provide extended hunting opportunity.

Objective 2: Increase opportunities for viewing moose, while educating the public concerning the needs of moose and the potential issues they face

Strategies:

a. Work with social media and news media sources to inform and educate the public about moose and moose management in Utah.
b. Work with local communities to reduce conflicts with moose in urban areas.
c. Use data from the Wildlife Migration Initiative to generate interest and excitement for moose in Utah.

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Figure 1. Statewide moose population trends, Utah 1957–2016. Abundance estimates are based on count data and have not been corrected for sightability.

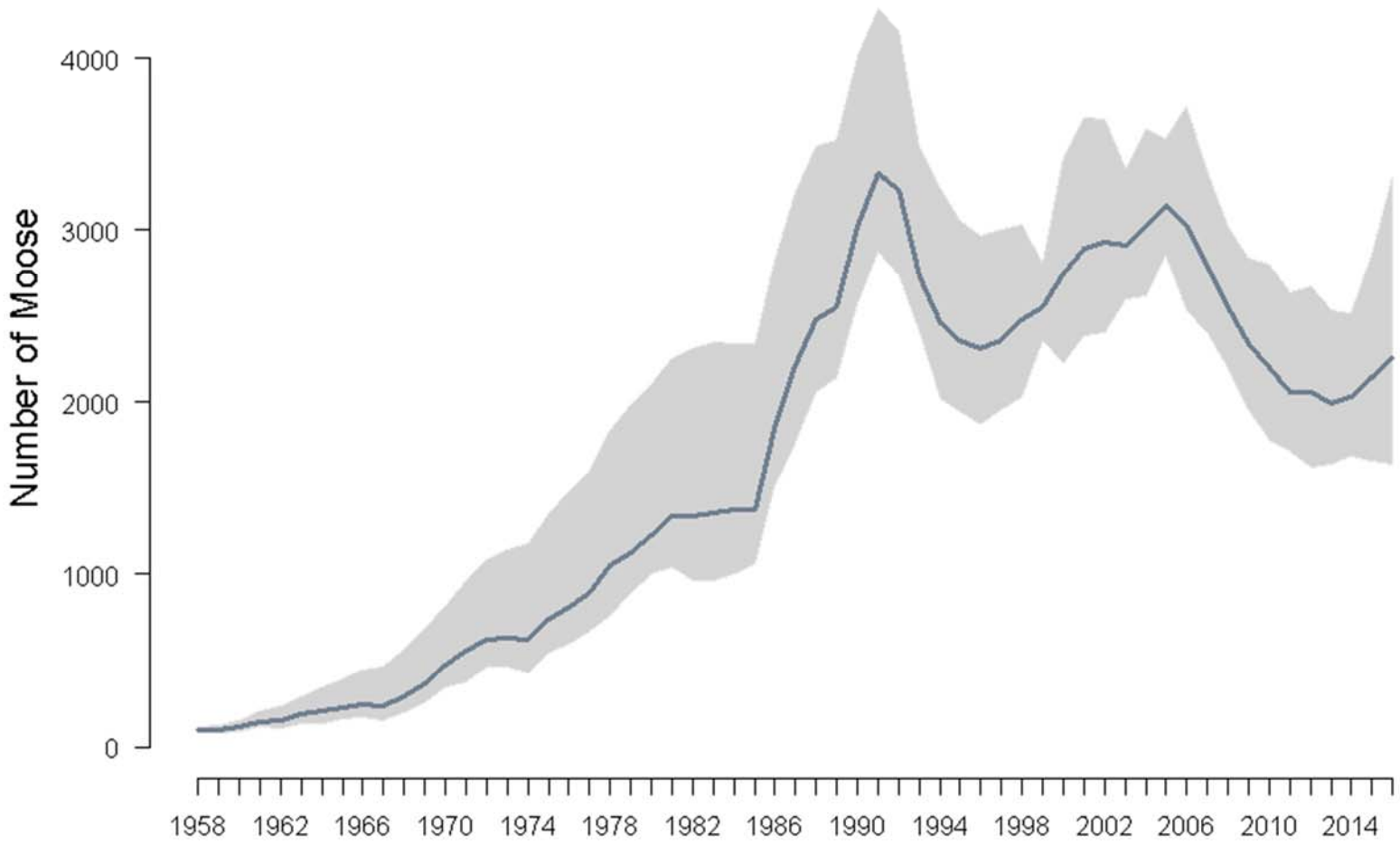

Figure 2. Current moose distribution by big game management unit, Utah 2017.

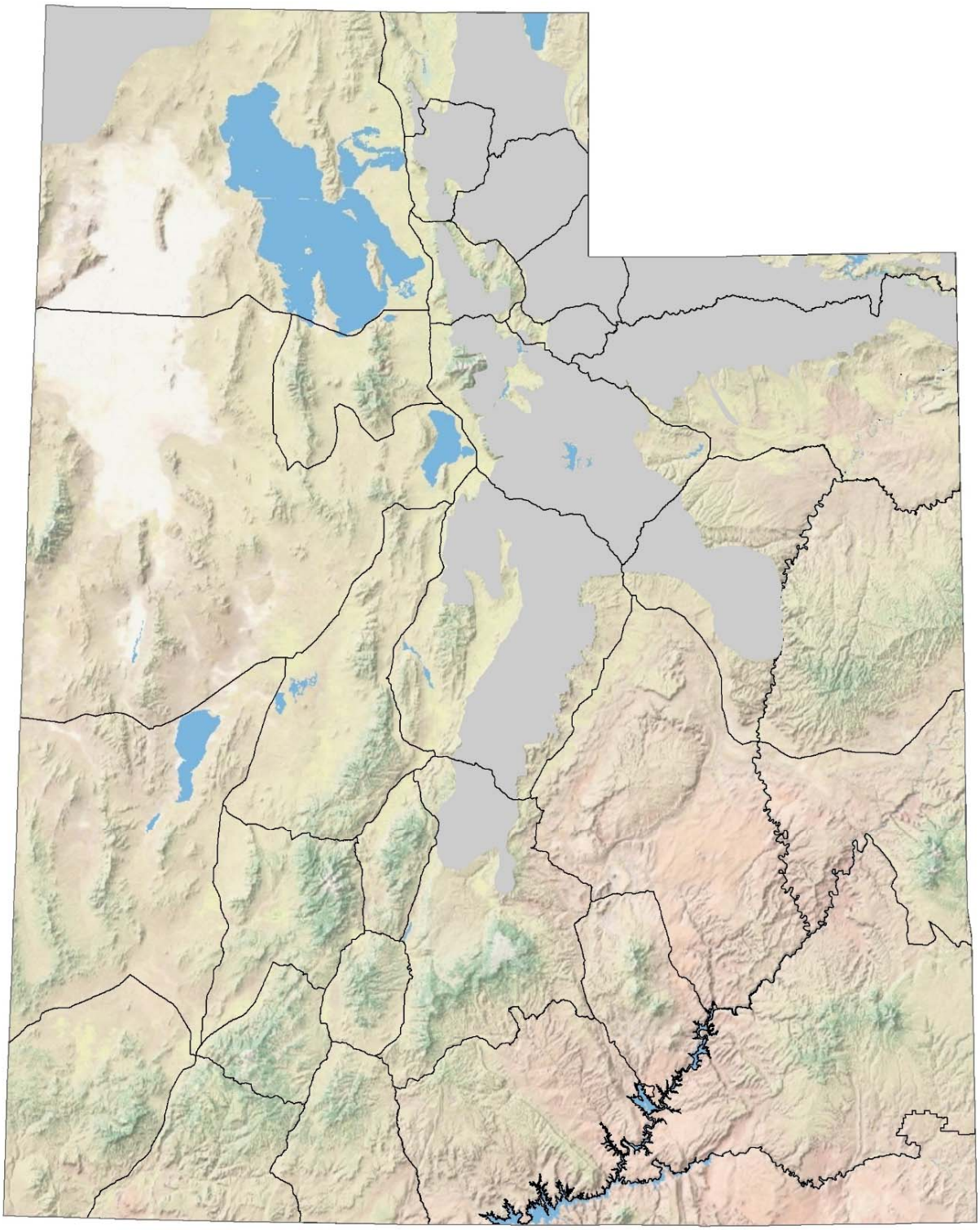

Figure 3. Statewide trends in moose harvest (bulls and cows) and hunters afield, Utah 1958–2016.

Figure 4. Harvested bull moose antler spread by age, Utah 1986–2016.

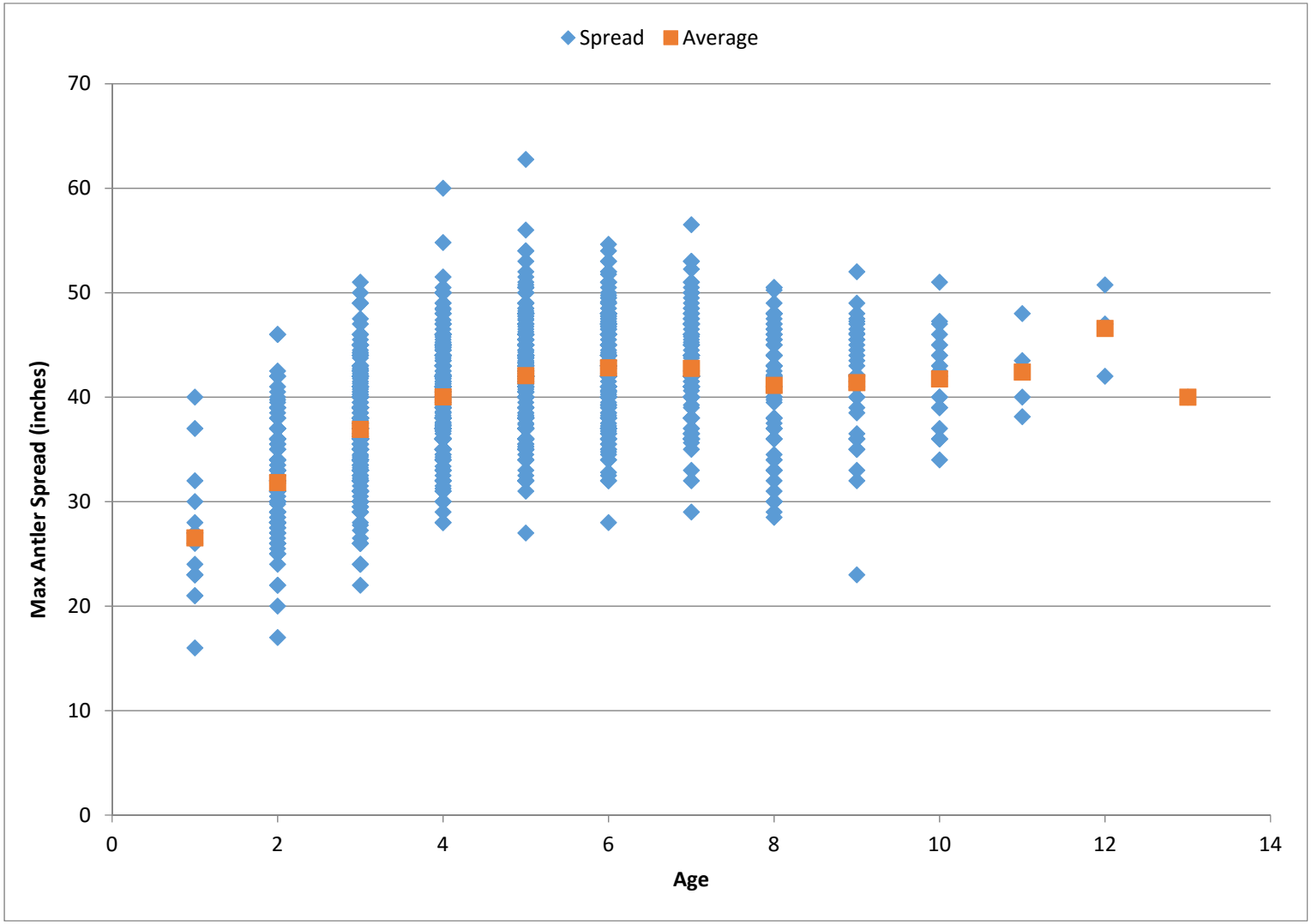

Figure 5. Statewide calves/100 cows from winter aerial surveys, Utah 1958–2017.

Table 1. Historical statewide moose harvest, Utah 1958–2016.

Year	Bull harvest	Cow harvest	Total harvest	Hunters afield	% success
1958	7	0	7	10	70
1959	5	0	5	9	56
1960	10	0	10	19	53
1961	8	0	8	14	57
1962	7	0	7	15	47
1963	9	0	9	15	60
1964	8	0	8	14	57
1965	8	0	8	15	53
1966	5	0	5	9	56
1967	13	0	13	15	87
1968	14	0	14	15	93
1969	22	0	22	25	88
1970	24	0	24	34	71
1971	32	0	32	63	51
1972	71	0	71	105	68
1973	56	0	56	101	55
1974	16	0	16	25	64
1975	20	0	20	25	80
1976	55	0	55	60	92
1977	30	18	48	50	96
1978	65	16	81	89	91
1979	57	65	122	127	96
1980	81	21	102	118	86
1981	78	18	96	116	83
1982	94	0	94	106	89
1983	89	0	89	107	83
1984	113	0	113	130	87
1985	105	0	105	120	88
1986	134	15	149	155	96
1987	140	14	154	155	99
1988	141	26	167	176	95
1989	181	25	206	209	99
1990	192	90	282	283	100
1991	192	99	291	296	98
1992	198	100	298	303	98
1993	174	59	233	299	78
1994	110	47	157	157	100
1995	140	16	156	177	88

Table 1. Historical statewide moose harvest, Utah 1958–2016 (cont.).

Year	Bull harvest	Cow harvest	Total harvest	Hunters afield	% success
1996	139	11	150	153	98
1997	142	25	167	171	98
1998	137	27	164	170	96
1999	110	35	145	147	99
2000	97	26	123	123	100
2001	169	34	203	204	100
2002	174	56	230	233	99
2003	139	24	163	163	100
2004	201	14	215	228	94
2005	205	21	226	240	94
2006	223	81	304	325	94
2007	236	96	332	364	91
2008	266	98	364	403	90
2009	243	40	283	293	97
2010	214	25	239	266	90
2011	176	8	184	204	90
2012	168	0	168	174	97
2013	146	0	146	155	94
2014	128	0	128	137	93
2015	137	0	137	143	96
2016	133	15	148	161	92

Table 2. Average age of harvested bull moose by hunt unit, Utah 2007–2016.

Unit		Year										Average
		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
2	Cache	4.6	4.5	4.1	4.9	3.7	3.8	3.8	3.4	4.6	5.1	4.4
3	Ogden	4.6	4.1	3.9	4.5	3.8	4.3	3.6	3.0	4.0	6.8	4.6
4	Morgan-Rich	3.9	4.4	4.9	4.7	4.3	4.3	4.2	4.5	5.1	4.6	4.7
5	East Canyon	3.6	4.6	3.0	4.7	3.2	4.2	3.0	3.4	4.6	3.8	3.9
6	Chalk Creek	4.8	4.3	4.8	3.6	4.0	4.1	4.2	4.0	4.9	3.7	4.2
7	Kamas	5.5	3.5	4.0	5.0	2.7	3.0	9.0	—	—	3.0	3.0
8A	North Slope, Summit	6.2	5.4	5.4	5.3	4.2	4.6	5.3	5.0	5.1	5.9	5.3
8BC	North Slope, W Daggett / Three Corners	5.0	3.9	5.7	4.2	6.0	3.7	5.0	4.0	5.0	4.5	4.5
9A	South Slope, Yellowstone	5.3	3.7	6.3	4.3	4.2	4.5	3.5	6.5	4.0	5.7	5.4
9BC	South Slope, Vernal / Diamond Mountain	4.0	5.0	5.5	4.3	3.0	4.0	—	—	—	3.0	3.0
17	Wasatch, Mountains	4.5	4.1	3.8	4.1	4.0	4.4	4.6	4.6	4.3	3.7	4.2
	Statewide	4.7	4.4	4.4	4.5	3.9	4.3	4.3	4.3	4.7	4.4	4.5

Table 3. Limited Entry drawing odds of obtaining a bull moose permit, Utah 1998–2016.

Year	Residents			Nonresidents		
	Applicants	Permits	Odds	Applicants	Permits	Odds
1998	4,501	102	1 in 44	151	3	1 in 50
1999	5,592	102	1 in 55	245	4	1 in 61
2000	7,048	110	1 in 64	372	7	1 in 53
2001	8,494	115	1 in 74	608	7	1 in 87
2002	10,595	121	1 in 88	755	8	1 in 94
2003	11,930	124	1 in 96	906	7	1 in 129
2004	12,902	142	1 in 91	1,037	7	1 in 148
2005	14,136	146	1 in 97	1,247	8	1 in 156
2006	15,078	163	1 in 93	1,433	10	1 in 143
2007	16,588	174	1 in 95	1,707	9	1 in 190
2008	16,085	201	1 in 80	1,566	14	1 in 112
2009	16,161	180	1 in 90	3,408	13	1 in 262
2010	16,344	161	1 in 102	3,555	9	1 in 395
2011	16,405	120	1 in 137	3,592	6	1 in 599
2012	16,763	106	1 in 158	3,925	8	1 in 491
2013	17,491	97	1 in 180	4,270	6	1 in 712
2014	18,186	86	1 in 211	4,644	7	1 in 663
2015	19,175	100	1 in 192	5,115	5	1 in 1,023
2016	20,391	112	1 in 182	5,668	3	1 in 1,889
2017	21,354	97	1 in 220	6,575	4	1 in 1,644

Table 4. History of moose transplants, Utah 1973–2017.

Year	Unit #	Source unit	Unit #	Release unit	Number released	Release area
1973	9	North Slope	16B	Central Mountains, Manti	18	Fish Creek
1974	6	Chalk Creek	16B	Central Mountains, Manti	19	Fish Creek
1978	9	North Slope	16B	Central Mountains, Manti	6	Fish Creek
1987	4	Morgan-South Rich	16B	Central Mountains, Manti	4	Fish Creek
1987	4	Morgan-South Rich	16B	Central Mountains, Manti	22	Joe's Valley
1988	4	Morgan-South Rich	25A	Plateau	27	Fish Lake
1989	4	Morgan-South Rich	16B	Central Mountains, Manti	12	Joe's Valley
1989	4	Morgan-South Rich	17B	Wasatch Mountains	6	Currant Creek
1989	4	Morgan-South Rich	25A	Plateau	10	Fish Lake
1990	6	Chalk Creek	25A	Plateau	32	Fish Lake
1990-1994		Wasatch Front	10A	Book Cliffs	38	Hill Creek
1991	3	Ogden	10A	Book Cliffs	19	Hill Creek
1991	3	Ogden	17B	Wasatch Mountains	12	Currant Creek
1992	3	Ogden	25A	Plateau	30	Fish Lake
1993	9	North Slope	10A	Book Cliffs	20	Hill Creek
1994-1999	—	Wasatch Front	9	South Slope	5	———
1994-1999	—	Wasatch Front	10A	Book Cliffs	15	Hill Creek
1995	9	North Slope	16B	Central Mountains, Manti	26	Joe's Valley
2000	3/4	Ogden / Morgan-South Rich	10A	Book Cliffs	20	Hill Creek
2001	5	East Canyon	17B	Wasatch Mountains	4	Currant Creek
2005	2/3/5/17	Cache / Ogden / East Canyon / Wasatch Mtns	—	Colorado	22	Grand Mesa
2005	4	Morgan-South Rich	—	Colorado	22	Grand Mesa
2006	2/3/5/17	Cache / Ogden / East Canyon / Wasatch Mtns	—	Colorado	16	Grand Mesa
2006	4	Morgan-South Rich	—	Colorado	24	Grand Mesa
2007	2/3/5	Cache / Ogden / East Canyon	8A	North Slope	—	Summit
2008	3	Ogden	—	Colorado	19	East of Meeker
2012-2017	—	Wasatch Front	11B	Nine Mile, Range Creek	16	Tavaputs Plateau

Table 5. Potential augmentation and reintroduction sites for future moose releases, Utah 2017–2027.

Region	Transplant_Type	Unit		Location
Northern	Augmentation	1	Box Elder	Raft Rivers - Clark's Basin, Johnson Canyon, One Mile Grouse Creek - Ingham Pass, Kimbell Creek
Central	Augmentation	16	Central Mtns, Nebo	Payson Lakes
Central/ Southeastern	Augmentation	16	Central Mtns, Manti	Fairview Canyon Huntington Canyon Pondtown-Upper Fish Creek Potter's Pond Skyline Drive-Ephraim Tunnel Upper Ferron Creek Upper Muddy Creek
Southeastern	Augmentation	11	Nine Mile, Range Creek	Tavaputs Plateau
Southern	Initial	22	Beaver	North Creek Merchant Valley-Three Creeks
	Augmentation	25	Plateau, Fishlake	Gooseberry-Seven Mile- UM Creek

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
MICHAL D. FOWLKS
Division Director

MEMORANDUM

Date: October 12, 2017

To: Wildlife Board and Regional Advisory Council Members

From: Jim Christensen, Northern Region Assistant Wildlife Manager

Subject: NORTHERN REGION UNIT DEER MANAGEMENT PLANS

Unit deer management plans are revisited every five years in conjunction with the range trend assessments on deer winter range. The range trend assessments were conducted in the Northern Region in 2016, therefore the Northern Region deer plans were revisited and updated in 2017. Unit management plans are necessary to guide management decisions regarding deer across the region according to the goals, objectives, and strategies outlined in the statewide mule deer management plan while allowing for regional variations according to local conditions. Deer management plans for seven units in the northern region (Box Elder, Cache, Ogden, Morgan/South Rich, East Canyon, Chalk Creek, Kamas) are proposed.

We are proposing in our plans:

1) No change to population objectives.
2) No change to buck:doe ratios.
3) Continued emphasis on habitat improvement.
4) Continued disease monitoring, agricultural damage and urban deer mitigation, predator management, deer/vehicle collision avoidance.

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DEER HERD UNIT MANAGEMENT PLAN
Deer Herd Unit # 1
(Box Elder)
October 2017

BOUNDARY DESCRIPTION

Box Elder, Tooele, Salt Lake, Davis and Weber counties - Boundary begins at the Utah-Idaho state line and Interstate 15; then west along this state line to the Utah-Nevada state line, south along this state line to Interstate 80, east on I-80 to I-15, north on I-15 to the Utah-Idaho state line.

LAND OWNERSHIP

RANGE AREA AND APPROXIMATE OWNERSHIP

	Yearlong range		Summer Range		Winter Range	
Ownership	**Area (acres)**	**%**	**Area (acres)**	**%**	**Area (acres)**	**%**
Forest Service	0	0%	47,174	6%	25,491	4%
Bureau of Land Management, Dept. of Defense	35,185	22%	57,466	8%	243,074	37%
Utah State Institutional Trust Lands	2,387	2%	17,752	2%	40,309	6%
Native American Trust Lands	0	0%	0	0%	0	0%
Private	115,756	73%	638,378	84%	341,858	53%
USFWS Refuge	0	0%	0	0%	0	0%
National Parks	0	0%	2,263	<1%	0	0%
Utah State Parks	0	0%	0	0%	0	0%
Utah Division of Wildlife Resources	4,796	3%	0	0%	0	0%
TOTAL	158,124	100%	763,033	100%	650,732	100%

UNIT MANAGEMENT GOALS

Manage for a population of healthy animals capable of providing a broad range of recreational opportunities, including hunting and viewing. Balance deer herd impacts on human needs, such as private property rights, agricultural crops and local economies. Maintain the population at a level that is within the long-term capability of the available habitat to support.

POPULATION MANAGEMENT OBJECTIVES

Target Winter Herd Size - Maintain a target population size of 20,000 wintering deer. This population objective remains both the short-term (5-year life of this plan) and long-term objective, barring significant changes in range conditions.

Herd Composition – General Hunt portion of Box Elder Unit: Maintain a 3-year average postseason buck to doe ratio of 15-17:100 in accordance with the statewide plan.

Unit 1

2006-2013 Objective:	20,000
2013-2018 Objective:	20,000
2018-2023 Objective:	20,000
Change from last plan	0

POPULATION MANAGEMENT STRATEGIES

Monitoring

Population Size – Winter population size will be estimated using a model that was developed to utilize harvest data, postseason and spring classifications and radio collar based survival estimates. Over winter mortality estimates will be determined using radio-collar data from nearby units and observations of mortality, and change-in- ratios from classification data.

Buck Age Structure - Estimates of the age class structure of the buck population will be determined primarily (directly) through the use of hunter harvested bucks at checking stations and field bag checks, and secondarily (indirectly) using post-season classification observations.

Harvest - The primary technique used to estimate harvest over the unit is the statewide uniform harvest surveys. Data collected at checking stations will also be used to compare with the uniform survey. Buck harvest strategies will be developed through the RAC and Wildlife Board process to achieve management objectives for buck:doe ratios. Antlerless harvest will be achieved, as needed, using a variety of methods and seasons to maintain a wintering population and to address depredation conflicts.

Limiting Factors (May prevent achieving management objectives)

Crop Depredation - Address depredation issues as prescribed by state law and DWR policy. Some geographic populations may be maintained at lower levels due to conflicts with crop production and private landscapes.

Habitat - Two-thirds of the Promontory peninsula critical winter range burned in 2001. Pinyon-juniper encroachment on summer and winter range in Unit 1 is increasing resulting in less forage and increased fire risk. Excessive habitat utilization will be addressed by antlerless harvests.

Predation – Refer to DWR predator management policy. Assess need for control by species, geographic area and season of year. Seek assistance from ADC when deer populations are depressed and where there is a reasonable chance of gaining some relief through a predator control effort. Predator control efforts will be focused just before and during the spring fawning period. Coyote removal through a bounty system is currently underway and future fawn/doe ratios will be used to determine if the removal was effective. Recommend cougar harvest to benefit deer while maintaining the cougar as a valued resource in its own right.

Highway Mortality - The cooperation with the Utah Department of Transportation to prevent vehicle collisions in terms of highway fences, underpasses, and earthen ramps along Interstates 15 and 84, and warning signs as needed throughout the unit is greatly appreciated. A significant number of highway mortalities may tend to reduce deer populations in the following areas: I-15 and I-84 from Tremonton to the Idaho border and SR-30 from Kelton to Rosette.

Illegal Harvest, Crippling Loss, Disease and Parasites - Although poaching losses appear insignificant in the Box Elder Unit, due primarily to a highly visible law enforcement effort, crippling losses are a concern, especially under buck-only hunting. Hunter survey studies (Austin, D.D. 1992. Great Basin Naturalist 52:364-372) suggests as many as 18 deer may be left in the field per 100 hunters. Disease is very difficult to evaluate, but high mortality is often associated with malnutrition and disease. The animal disease diagnostic facility associated with Utah State University acts as the laboratory to identify disease problems. Chronic Wasting disease is of further concern though it has not yet been detected on the unit. Surveillance will be implemented by testing hunter harvested animals as well as targeted surveillance of symptomatic animals.

Urban Deer - Continued development across this Unit has lead to an increase in nuisance deer complaints. The Urban Deer Control Rule, R657-65, will be used to help municipalities address urban deer issues. Additional hunting opportunities outside of municipal boundaries will also be used to address nuisance complaints.

HABITAT

Habitat Description

The Box Elder Management Unit is one of the largest in the state. However, big game range accounts for less than one-third of the unit.

The Raft River Mountains run east-west, parallel to the Utah-Idaho border. Slopes on this mountain range are moderately steep on the south and east, and gentler on the north and west. The highest point is 9,925 feet on Dunn Benchmark peak at the head of the Clear Creek drainage. The Grouse Creek Mountains are relatively narrow and steep, and run north-south. At 9,000 feet, Red Butte is the highest point in the Grouse Creek Range. The topography of the Goose Creek Mountains is generally more nominal, the highest point being 8,584 feet on Twin Peaks. The Dove Creek Mountains are rougher, but the terrain becomes gentler near the Three Corners area.

Seasonal migration consists mainly of elevational and north to south migrations from summer range to winter range. A substantial number of deer spend their summers in Idaho then migrate south onto Unit 1 winter ranges. Summer range is located in the upper portions of the Raft River, Goose Creek and Grouse Creek Mountains. Areas specifically listed as summer concentration areas for deer are the uppermost elevations of the Raft River Mountains, Johnson Creek Drainage, the head of Lynn Valley, the crest of the Grouse Creek Mountains, and Hardister Creek Plateau.

Winter range mostly follows the foothills of the major mountain ranges within the unit. The upper limit of normal deer winter range varies from 6,000 to 8,000 feet over the unit based on the mountain range on which it occurs. The lower limit of normal deer winter range typically follows the line of Hwy 30 from Curlew Junction to the Nevada border, with further deer winter range occurring in Nevada and Idaho. This unit has a unique situation during severe winters. The limits for the crucial deer winter range are not only lowered at the upper limit, but are also raised at the lower limit. This is because the low growing vegetation at the lower limits of normal deer winter range are easily covered by heavy snowfall, making them unavailable for big game use.

Seven general vegetation types appear to dominate the big-game range. Sagebrush makes up 55% of the winter range and 58% of the summer range. Black sagebrush occupies ridge tops within the summer range and the upper reaches of the winter range. On the summer range, the black sagebrush type has the highest abundance of grasses and forbs. Within the summer range, the browse type is dominated by curlleaf mountain mahogany on the drier sites and by maple on the more mesic sites. This type provides a good variety of spring-fall forage, yet makes up less than 1% of the winter range. The sagebrush-juniper and juniper types, together account for 31% of the winter range. In these vegetation types, juniper trees are more important for the thermal cover than for forage. Although small amounts of the aspen-timber and forb-grass types are found along the upper edges of winter range, their primary value is as summer range. A more detailed description and vegetation maps of the different vegetation types for Wildlife Management Unit 1 can be found in the 1970 Range Inventory Report published in 1971 by King and Muir.

HABITAT CONCERNS

Summer range on the Box Elder Unit is mostly at higher elevations in the Sawtooth National Forest and Grouse Creek Mountain Range. Summer range habitat concerns are mainly the loss of forbs and shrubs due to pinyon-juniper encroachment.

Higher elevation summer range and water resources are the major limiting factors for mule deer

populations in the Western portion of the Box Elder Unit. Lower elevation winter range is at risk of becoming a limiting factor on the eastern portion of the unit due to the potential for development and increasing urbanization, especially along the West Hills north of I-84 and west of I-15, and Thatcher Mountain west of SR-102.

Additional threats and losses to deer summer and winter range in the West Box Elder area is the reduction in habitat quality due to the loss of critical browse species (sagebrush, bitterbrush etc). This loss has been attributed to a number of factors such as fire, agriculture, drought etc. However, the abundance of weedy annual grasses and the increase of other invasive weeds are the more likely causes of sagebrush decline. These weedy species can form dense mats of cover that compete with seedling and young sagebrush plants, which limits establishment of new sagebrush plants into the population. As the sagebrush population matures, decadence increases and density decreases as old plants begin to die. These annual grasses can also increase fuel loads and increase the chance of a catastrophic fire event.

Mule deer winter range habitat has seen a decrease in sagebrush density. Causes of sagebrush decline are varied and multiple causes may have compounded effects on the low potential studies in this unit. The moderate drought in recent years has likely caused increased stress on plants, and negatively impacted them. Sagebrush age structure across the area is generally old and one age class. The lack of regeneration of the stand through establishment of young sagebrush is a concern. Annual grass species are present but not prevalent through most of the areas. However, the range trend does show increases of weedy species such as cheatgrass and bulbous bluegrass in many of the low potential studies in this unit. Perennial grass and forb species have increased on many of the studies as browse species decline, and may compete with browse establishment. This is especially the case for the seeded perennial species crested wheatgrass which is prevalent throughout western Box Elder County.

Crucial mule deer habitat in all areas on the Box Elder Unit is also being lost and degraded through Pinyon-Juniper expansion. In certain areas where Pinyon-Juniper stands occur, the spread and invasion of young juniper have had a dramatic negative impact on existing browse and other understory species.

HABITAT MANAGEMENT

Contributing factors to the loss of browse species such as the impact of the increase in weedy species, particularly annual grasses, juniper expansion, lack of browse regeneration and other variables are all of concern in the habitat management of the Box Elder Unit. Maintenance and/or enhancement of forage production through direct range improvements throughout summer range on sub-unit 1A – west of the Locomotive Springs Road; and on winter range portions of the southern Promontory peninsula on sub-unit 1B – east of the Locomotive Springs Road; must be continued to achieve population management objectives. Working with private and federal agencies to maintain and protect critical and existing summer and winter range from future losses, and providing improved habitat security and escapement opportunities for deer must also be continued to achieve population management objectives.

Loss of critical winter ranges to development is the highest cause of loss of mule deer habitat on the East Box Elder area. The loss of sagebrush and other browse species on the remaining winter range is important when considering habitat quality. Contributing factors to the loss of browse species such as the impact of the increase in weedy species, particularly annual grasses, juniper expansion, lack of browse regeneration and other variables are all of a concern in the habitat management of the Box Elder Unit.

To address the direct loss of habitat, efforts will be made towards the protection and conservation of remaining mule deer habitat. Efforts must be made to work with counties, cities, private landowners and federal agencies to maintain and protect critical and existing winter range from future losses. Through existing partnerships and developing new conservation partners efforts are being made to identify and prioritize critical habitat areas. Conservation easements will be an important part of this effort, and other conservation efforts will be ongoing throughout the unit.

To address habitat quality and degradation, habitat improvement projects have been, and will continue to be planned throughout the unit. Habitat projects have been and are being done on UDWR Wildlife Management Areas, private lands, US Forest Service lands, and Bureau of Land Management lands

throughout the unit. The habitat projects are designed to address the specific issues within each project area. Recent past projects have included prescribed aspen burning on the Sawtooth National Forest, annual grass control and shrub plantings on Promontory Mountain, and pinyon-juniper thinning/removal on summer, winter, and transitional range in West Box Elder.

In critical winter range habitat, Pinyon-Juniper expansion is a crucial aspect of winter browse species loss. Projects that address the removal of P/J from these areas are of high importance and should be addressed whenever possible. These projects should be done on public and private lands when the opportunity is available. Addressing these needs on private land is crucial as a large majority of winter range falls on private lands. All tools that are available should be considered, such as chaining, lop and scatter, bullhog removal, and chemical removal as well. In accomplishing the removal of P/J on private land, private landowners' needs should also be considered.

On the Promontory Range, any opportunity to increase browse components on the range should be looked at closely. Hundreds of wintering mule deer have been observed utilizing the range on the Promontory, and any disturbance that could be beneficial to a browse enhancement project should be taken advantage of for the benefit of wintering mule deer.

There has been an active effort to address many of the limitations on this unit through the Watershed Restoration Initiative (WRI). A total of 106,845 acres of land have been treated within the Box Elder Unit since the WRI was implemented in 2004. An additional 23,756 acres are currently being treated and treatments have been proposed for an additional 32,672 acres. Treatments frequently overlap one another bringing the total completed treatment acres to 127,194 acres for this unit. Other treatments have occurred outside of the WRI through independent agencies and landowners, but the WRI comprises the majority of work done on deer winter ranges throughout the state of Utah.

The following are some of the areas that have been targeted for habitat projects within the unit over the next five years:

- Straight Fork Creek, Etna Reservoir, Keg Springs. Projects on the west side of the Grouse Creek Range should be focused on removal of encroaching pinyon-juniper, and reestablishing understory with summer and winter browse species as well as species of plants that can be used in the spring by wintering deer.
- Winter range enhancement on Promontory Mountain.
- Prescribed burning of aspen and removal of encroaching pinyon-juniper on the Sawtooth National Forest.
- Devil's Playground, Emigrant Pass, and Warm Springs Hill, Park Valley and Rosette. Projects on the east side of the Grouse Creek Range and south slope of the Raft River range should be focused on removal of encroaching pinyon-juniper, and reestablishing understory with summer and winter browse species as well as species of plants that can be used in the spring by wintering deer.
- Riparian area protection near Kimball Creek and Straight Fork Creek.

HABITAT MANAGEMENT STRATEGIES

Vegetative data collected by the UDWR Range Trend Studies crew is an additional component that will be used to address range restoration needs. The Range Trend Data is collected every five years on the 24 permanent trend transects on the Box Elder Unit. These data will also be evaluated as related to deer management by the biologist.

In addition to these data, annual range utilization transects will be evaluated and enumerated.

Re-vegetation of poor condition rangeland and winter ranges damaged by wildfire will be accomplished as time and materials are available.

PERMANENT RANGE TREND DATA

Purpose of Range Trend Studies
The ability to detect changes in vegetation composition (range trend) on big game winter ranges is an important part of the Division's big game management program. The health and vigor of big game populations are closely correlated to the quality and quantity of forage in key areas.

The majority of the permanent range trend studies are located on deer and elk winter ranges. Range trend data are used for habitat improvement planning purposes.

Objective
Monitor, evaluate, and report range trend at designated key areas throughout the state, and inform Division biologists, public land managers, and private landowners of significant changes in plant community composition in these areas.

Expected Results and Benefits
Range trend studies are resurveyed every five years, and vegetation condition and trend assessments are made for key areas.

Summary and Excerpts of 2016 Range Trend Result

Unit 1 Box Elder

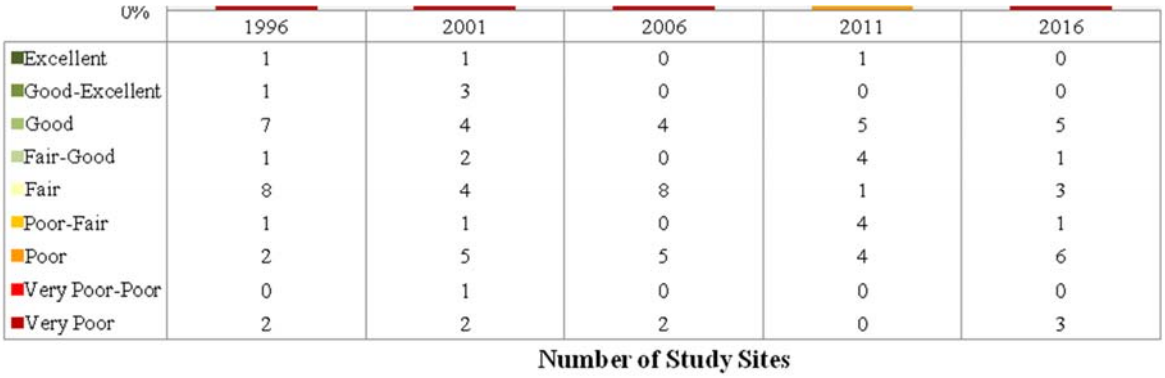
Deer Winter Range Condition Assessment
The condition of deer winter range within the Box Elder management unit has continually changed on the sites sampled since 1996. The active Range Trend sites sampled within the unit are considered to be in very poor to good-excellent condition as of the 2016 sample year. Kilgore Basin, Nut Pine Hills, Clarks Basin, Dake Pass, and Patterson Pass have remained in good condition, while Sheep Range Spring is considered to be in fair-good condition. Rosette, Bovine Exclosure, and Kimber Ranch are in fair condition, and Devils Playground is in poor-fair condition. Chokecherry Springs, South Side Emigrant Pass, Broad Hollow, Cedar Hills, Bedke Spring, and Bally Mountain are in poor condition. Finally, the Mud Springs Basin, Red Butte Exclosure, and Raft River Narrow studies are considered to be in very poor condition generally due to the presence of annual grasses and lack of preferred browse cover. The treated sites have generally improved as time since treatment has increased; the exceptions to this are the Kimbell Creek study, which went from excellent to fair-good, the Dairy Valley GIP 2 study, which remained in very poor condition, and the Hereford 2 site which remained in fair condition. The Rosette, Chokecherry Springs, Devils Playground, Mud Springs Basin, Raft River Narrows, Broad Hollow, Cedar Hills, Bedke Spring, and Bally Mountain studies are also considered to be Range Trend sites and are discussed above. Buckskin Spring, Etna Reservoir, Pine Creek, and Indian Creek were all sampled prior to treatment and were in very poor to good condition. The Coldwater 1 study went from very poor to poor, Morris GIP went from very poor to good, Dairy Valley GIP 1 improved from fair-good to good, and the Hereford 1 study improved from good to excellent condition. It is possible given more time and continual monitoring that these sites will (continue to) improve.

Desirable Components Index: The desirable components index (DCI) for deer was created as a tool to address condition and/or value of winter ranges for mule deer. This index was designed to score mule deer winter range based upon several important vegetation components (ie., preferred browse cover, shrub decadence, shrub young recruitment, cover of perennial grasses, cover of perennial forbs, cover of annual grasses and cover of noxious weeds). Although the index may be useful for assessing habitat for other species (ie. sage grouse and elk), the rating system was devised to specifically address mule deer winter range requirements.

This index is used primarily to determine if a particular site has the vegetation components necessary to be a good winter range for mule deer. It can also be used to identify areas where habitat restoration projects may be needed and assist land managers in determining possible rehabilitation options. Because it does not take into account factors such as soil stability, hydrologic function, and other environmental factors, it should not be used to assess a sites function and/or condition as typically used by the Federal land management agencies. Desirable mule deer winter range provides 12-20% of preferred browse cover, 20% or less shrub decadency, and 10% or more of the shrub population is young. The herbaceous

understory contains 8-15% perennial grasses cover, 5% perennial forb cover, and less than 5% annual grass cover.

Deer winter range Desirable Components Index (DCI) summary by year of Range Trend sites for WMU1, Box Elder



0%	1996	2001	2006	2011	2016
Excellent	1	1	0	1	0
Good-Excellent	1	3	0	0	0
Good	7	4	4	5	5
Fair-Good	1	2	0	4	1
Fair	8	4	8	1	3
Poor-Fair	1	1	0	4	1
Poor	2	5	5	4	6
Very Poor-Poor	0	1	0	0	0
Very Poor	2	2	2	0	3

Number of Study Sites

CURRENT POPULATION STATUS

Year	Buck Harvest	Post-Season F/100 D	Post-Season Buck/100 D	Post-Season Population	Population Objective	% of Objective
2014	1,072	63	18	11,600	20,000	58%
2015	1,311	65	21	12,850	20,000	64%
2016	1,497	58	19	14,000	20,000	70%

Duration of Plan

This unit management plan was approved by the Wildlife Board on _____ and will be in effect for five years from that date, or until amended.

DEER HERD UNIT MANAGEMENT PLAN
Deer Herd Unit # 2
(Cache)
October 2017

BOUNDARY DESCRIPTION

Cache, Rich, Weber, and Box Elder counties - Boundary begins at the Utah-Idaho state line and I-15; south on I-15 to US-91; northeast on US-91 to SR-101; east on SR-101 to Hardware Ranch and USFS Road 054 (Ant Flat); south on USFS 054 to SR-39; east on SR-39 to SR-16; southeast on SR-16 to the Utah-Wyoming state line; north along this state line to the Utah-Idaho state line; west along this state line to I-15.

LAND OWNERSHIP

RANGE AREA AND APPROXIMATE OWNERSHIP

	Yearlong range		Summer Range		Winter Range	
Ownership	**Area (acres)**	**%**	**Area (acres)**	**%**	**Area (acres)**	**%**
Forest Service	0	0%	273,346	55%	52,358	16%
Bureau of Land Management	845	<1%	46,126	9%	94,909	29%
Utah State Institutional Trust Lands	245	<1%	25,001	5%	28,933	9%
Native American Trust Lands	0	0%	0	0%	0	0%
Private	104,662	99%	146,362	30%	133,488	41%
Department of Defense	0	0%	0	0%	0	0%
USFWS Refuge	0	0%	0	0%	0	0%
National Parks	0	0%	0	0%	0	0%
Utah State Parks	0	0%	0	0%	17	<1%
Utah Division of Wildlife Resources	81	<1%	4,552	1%	11,823	4%
TOTAL	105,833	100%	495,387	100%	321,528	100%

UNIT MANAGEMENT GOALS

The primary goal is to maintain the proper balance between the number of animals in the deer herd and the habitat available on the limited winter range, thereby sustaining physiologically healthy deer. Also, to provide public hunting and non-consumptive opportunities, promote additional harvest opportunities for landowners, recommend measures for highway safety, and consider private property values.

POPULATION MANAGEMENT OBJECTIVES

Target Winter Herd Size - Maintain a target population size of 25,000 wintering deer. This population objective remains for both the short-term (5-year life of this plan) and long term, barring significant changes in range conditions.

Herd Composition – General Hunt portion of Cache Unit: Maintain a 3-year average postseason buck to doe ratio of 15-17:100 in accordance with the statewide plan. Crawford Mountain subunit, managed under combined general season and limited entry hunting: Maintain a 3-year average post-season buck: doe ratio of 15-17:100 and adjust late season limited entry permits according to migratory populations.

1994-2005 Objective:	25,000
2006-2013 Objective:	25,000
2013-2018 Objective:	25,000
2018-2023 Objective:	25,000

Change from last plan 0

POPULATION MANAGEMENT STRATEGIES

Monitoring

Population Size - Utilizing harvest data, postseason and spring classifications and mortality estimates, a computer model will be used to estimate winter population size. Annual mortality will be estimated based on survival of radio collared animals on this unit.

Buck Age Structure - Estimates of the age class structure of the buck population will be determined primarily (directly) through the use of hunter harvested bucks at checking stations and field bag checks, and secondarily (indirectly) using post-season classification observations.

Harvest - The primary technique used to estimate harvest over the unit is the statewide uniform harvest surveys.

Limiting Factors (May prevent achieving management objectives)

Crop Depredation - Address depredation issues as prescribed by state law and DWR policy. Some geographic populations may be maintained at lower levels due to conflicts with crop production and private landscapes.

Habitat - Winter range is the major limiting factor on the Cache Unit representing less than 30% of the total Unit. Increased urbanization is continually reducing the amount of traditional winter range and much of the winter range is in poor condition due to past fires, competition from introduced weedy species, and the lack of spring livestock grazing (Clements and Young 1997). Excessive habitat utilization will be addressed by antlerless harvests.

Predation – Consistently high fawn/doe ratios seem to indicate that predation is not a primary limiting factor for deer on the Cache Unit. Coyote removal through a bounty system is currently underway and future fawn/doe ratios will be used to determine if the removal was effective.

Highway Mortality - The cooperation of the Utah Department of Transportation to prevent vehicle collisions in terms of highway fences, underpasses, and earthen ramps in Wellsville Canyon, and warning signs as needed throughout the Unit is greatly appreciated. A significant number of highway mortalities may tend to reduce deer populations in the following areas: Wellsville Canyon, Highway 91 between Smithfield and Richmond, and Logan Canyon.

Illegal Harvest, Crippling Loss, Disease and Parasites - Although poaching losses appear insignificant on the Cache, due primarily to a highly visible law enforcement effort, crippling losses are a concern, especially under buck-only hunting. Hunter survey studies suggests as many as 18 deer may be left in the field per 100 hunters (Austin 1992). Disease is very difficult to evaluate, and high mortality is often associated with disease and malnutrition. The animal disease diagnostic facility associated with Utah State University acts as the laboratory to identify disease problems. Chronic Wasting disease is of further concern though it has not yet been detected on the unit. Surveillance has been implemented and will

continue by testing hunter harvested animals as well as targeted surveillance of symptomatic animals.

Urban Deer - Continued development across this Unit has lead to an increase in nuisance deer complaints. The Urban Deer Control Rule, R657-65, will be used to help municipalities address urban deer issues. Additional hunting opportunities outside of municipal boundaries will also be used to address nuisance complaints.

HABITAT

Habitat Description

The Cache Management Unit can be divided into three main areas which are isolated, to some extent, from one another (Wellsville, Cache and Rich areas). The first part is the Wellsville Mountains and their northern extension, Clarkston Mountain. The second area is Cache Valley with its crucial winter range along the east side of the valley on the foothills and west slope of the Wasatch Mountain Range along with summer range on the Cache National Forest to the east. Big game summer on the forest and use the winter ranges in the canyons and upper benches of the valley. The third area is Rich County, which includes a vast area of private and public range land on the east side of the Cache National Forest, extending to the Wyoming state line. Prior to 1993, these three areas were managed as separate deer herd units. In 1993, these areas were combined into Wildlife Management Unit 2 and managed as sub-units.

The Wellsville Mountains have remained relatively inaccessible because of the steep topography. Rising abruptly from the valley floor, the ridge of the Wellsville Mountains reaches over 9,300 feet in elevation. The upper limit for normal winter range is generally 7,000 feet, but in severe winters that limit drops to about 6,000-6,500 feet. In some canyons the upper limit drops to 6,000 feet and excludes the north slopes. Box Elder Canyon reaches a low limit at 5,400 feet. The lower limit follows an elevation of 4,400 feet. Most deer summer on the east side of the Wellsville Mountains and migrate to the west side each fall for winter range. Coldwater Canyon is the most notable concentration area for deer, and there is some migration from the Mantua-Willard herd unit. Most of the deer that winter on Clarkston Mountain range, also summer on the Caribou National Forest in Idaho. Land development and associated habitat loss is still a critical problem facing wildlife management in this area.

The majority of the deer range, along with the largest deer herd, is within the Cache County portion of the unit. Most of this herd summers at higher elevations in the Wasatch-Cache National Forest west of the Wasatch Range summit. The majority of the winter range is also on Forest Service land. The south-facing slopes of Blacksmith Fork, Logan, Dry, Providence, and Millville canyons are all important wintering areas. The lower winter range limits are restricted by the upper limits of the towns and cities of Cove, Richmond, Smithfield, Hyde Park, North Logan, Logan, Providence, Millville, Nibley, and Hyrum. These limits to the winter range also include the deer-proof fence above agricultural land between Hyrum and Logan. Between Hyde Park and the Idaho border, the lower third of the winter range is located on private land and is threatened by increased cultivation and subdivision developments.

The Rich County portion of the Cache deer herd unit, located on the east face of the Wasatch Range, is topographically similar to the west face. However, the drainages of Swan Creek, Garden City Canyon, Jebo Canyon, Cottonwood Canyon, and Temple Canyon are not as deep as those on the west face. Elevation ranges between 5,900 feet at Bear Lake and 9,114 feet on Swan Peak. Randolph and Woodruff are the principle municipalities located in Rich County. These towns are located on a strip of private land along the Bear River. Much of the lower country is privately owned and is grazed or farmed. Estimates are that 74,560 acres (33%) of the winter range is private land (Jensen et al. 1985). A much higher percentage of the severe winter range is private. The Bureau of Land Management (BLM) owns a majority of the winter range, controlling much of the land in the central part of the unit and the Crawford Mountains to the east. The upper limit of the winter range begins at about 8,000 feet at the Idaho border and gradually descends to 6,000 feet at Cottonwood Canyon. The lower limit generally follows the 6,000-foot contour.

Habitat Concerns

Mule deer habitat on the Cache Unit is fairly abruptly divided between summer range and winter range. The summer range is mostly at higher elevations in the Wasatch-Cache National Forest. Summer range habitat concerns are mainly the loss of aspen stands due to conifer encroachment.

Lower elevation winter range is the major limiting factor for mule deer populations on the Cache Unit. The winter range areas are also those areas that are most at risk. The largest threat to mule deer habitat on the Wellsville and Cache areas is the direct loss of crucial winter range acres due to development and urbanization; Particularly in Cache Valley along the east side from Hyrum, north to Richmond. Cache County has had an increase in population from 42,000 residents in 1970 to 112,656 in 2010. The associated increase in homes followed the trend from 12,000 homes in 1970 to 35,915 in 2010. Most of the increase in home building is occurring on the foothills in what was historic deer winter range.

Additional threats and losses to deer winter range on the Wellsville and Cache areas is the reduction in habitat quality due to the loss of critical browse species (sagebrush, bitterbrush, etc.). This loss has been attributed to a number of factors, fire, agriculture, drought etc. However, the abundance of weedy annual grass species, and the increase of the exotic, weedy, perennial grass bulbous bluegrass are the more likely causes of sagebrush decline. These weedy species can form dense mats of cover that compete with seedling and young sagebrush plants, which limits establishment of new sagebrush plants into the population. As the sagebrush population matures, decadence increases and density decreases as old plants begin to die. Annual grass species such as cheatgrass can also increase fuel loads and increase the chance of a catastrophic fire event.

The Rich area of the Cache Unit shares the same summer range as the Cache area. The winter range of the Rich area has also experienced loss due to development. The area around Bear Lake, from Garden City south to Laketown has seen recreation home development increases over the last few decades. The majority of the Rich area, through Randolph and Woodruff has not experienced significant development.

Mule deer winter range habitat has seen a decrease in sagebrush density. Causes of sagebrush decline are varied and multiple causes may have compounded effects on the low potential studies in this unit. The moderate drought in recent years has likely caused increased stress on plants, and negatively impacted them. Sagebrush age structure across the area is generally old and one age class. The lack of regeneration of the stand through establishment of young sagebrush is a concern. Annual grass species are present but not prevalent through most of the areas. However, the range trend does show increases of weedy species such as cheatgrass and bulbous bluegrass in many of the low potential studies in this unit. Perennial grass and forb species have increased on many of the studies as browse species decline, and may compete with browse establishment. This is especially the case for the seeded perennial species crested wheatgrass which is prevalent throughout Rich County.

Crucial mule deer habitat in all areas on the Cache Unit is also being lost and degraded through Juniper expansion. In certain areas where Juniper stands occur, the spread and invasion of young juniper have had a dramatic negative impact on existing browse and other understory species.

HABITAT MANAGEMENT

Loss of critical winter ranges to development is the highest cause of loss of mule deer habitat on the Wellsville and Cache areas. The loss of sagebrush and other browse species on the remaining winter range is important when considering habitat quality. Contributing factors to the loss of browse species such as the impact of the increase in weedy species, particularly annual grasses, juniper expansion, lack of browse regeneration and other variables are all of a concern in the habitat management of the Cache Unit.

To address the direct loss of habitat, efforts will be made towards the protection and conservation of

remaining mule deer habitat. Efforts must be made to work with counties, cities, private landowners and federal agencies to maintain and protect critical and existing winter range from future losses. Through existing partnerships and developing new conservation partners efforts are being made to identify and prioritize critical habitat areas. Conservation easements will be an important part of this effort. For example, recent efforts have included securing a conservation easement in crucial winter range at the mouth of Smithfield Dry Canyon, from an existing partner to the UDWR. Other conservation efforts are ongoing throughout the unit.

To address habitat quality and degradation, habitat improvement projects have been and will continue to be planned throughout the unit. Habitat projects have been and are being done on UDWR Wildlife Management Areas, private lands, US Forest Service lands and Bureau of Land Management lands throughout the unit. The habitat projects are designed to address the specific issues within each project area. Recent past projects have included prescribed aspen burning on the National Forest, annual grass control and shrub plantings on the Millville face WMA. Prescribed burns of transitional range on the Curtis Plateau, crested wheatgrass conversion to increase sagebrush, Juniper removal, shrub transplants, etc.

It is recommended that work to reduce conifer encroachment (bullhog, chaining, lop and scatter, etc. and prescribed fire in aspen) continue or begin in these communities. On some sites, management of annual grasses might be necessary through herbicide application. Introduced perennial grasses may also need management through changes in grazing or restoration of competitive native species. When reseeding, care should be taken in species selection and preference should be given to native species when possible.

The following are some of the areas that have been targeted for habitat projects within the unit over the next five years:

- Logan, Green, Providence and Blacksmith Fork Canyons. Projects should be focused on removal of encroaching juniper, and reestablishing understory with winter browse species as well as species of plants that can be used in the spring by wintering deer.
- Birch Creek area north of Highway 39 and west of Woodruff, UT. Projects should focus on removal of encroaching juniper, and reestablishing understory with winter browse species as well as species of plants that can be used in the spring by wintering deer.
- Winter range enhancement on all wintering WMA's on the unit including Hardware Ranch, Millville Face, Richmond, and Coldwater through scalping and hand planting browse species.
- Juniper removal and reseeding in Blacksmith Fork Canyon and on Hardware Ranch WMA.
- Transitional Range burn on Hardware Ranch WMA.
- Juniper removal around Temple Fork and Dry Canyon.
- Aspen regeneration prescribed fire in Card Canyon, near Old Ephraim's Grave, Tony Grove, and Franklin Basin.
- Winter range enhancement through browse establishment on SFW property east of Smithfield, known as the Weeks property.
- Fire rehab on Coldwater WMA

PERMANENT RANGE TREND DATA

Purpose of Range Trend Studies

The ability to detect changes in vegetation composition (range trend) on big game winter ranges is an important part of the Division's big game management program. The health and vigor of big game populations are closely correlated to the quality and quantity of forage in key areas.

The majority of the permanent range trend studies are located on deer and elk winter ranges. Range trend data are used for habitat improvement planning purposes.

Objective

Monitor, evaluate, and report range trend at designated key areas throughout the state, and inform Division biologists, public land managers, and private landowners of significant changes in plant community composition in these areas.

Expected Results and Benefits
Range trend studies are resurveyed every five years, and vegetation condition and trend assessments are made for key areas.

Summary and Excerpts of Range Trend Result

Unit 2 Cache

Range Trend studies have been sampled within WMU 2 on a regular basis since 1984, with studies being added or suspended as was deemed necessary. Due to changes in sampling methodologies, only data collected following the 1992 sample year are included in this summary. Monitoring studies of WRI projects began in 2004; when possible, WRI monitoring studies are established prior to treatment and sampled on a regular basis following treatment. Due to the long-term nature of the studies, many of the Range Trend and WRI studies have had some sort of disturbance or treatment prior to or since study establishment.

The condition of deer winter range within the Cache Management Unit has continually changed on the sites sampled since 1996. The Range Trend sites sampled within the unit are considered to be in very poor to excellent condition as of the 2016 sample year. South Crawford Mountains remained in excellent condition, Twin Creek improved from good to excellent, Otter Creek went from excellent to good, and State Line, Braizer Canyon, Higgins Hollow, and Pole Hollow Spring remained in good condition. Wood Pass went from good to fair-good condition while Woodruff Longhill remained in fair-good condition, and North Eden and Woodruff Co-op remained in fair condition. Warrens Spring improved from poor to fair, Mouth of Two Jump Canyon remained in poor-fair condition, and Garden City Canyon, Woodruff Creek, and Coldwater WMA remained in poor condition. Finally, the High Creek, Mouth of Blacksmith Fork, Beirdneau, Second Dam Blacksmith Fork, Hardware Plateau, Meadowville, Right Fork Logan Canyon, Swan Creek, Flat Bottom Canyon, Laketown Canyon, and Hardware Gravel Pit studies are considered to be in very poor or very poor-poor condition generally due to the lack of browse cover and sagebrush diversity and/or the presence of annual grasses.

Desirable Components Index: The desirable components index (DCI) for deer was created as a tool to address condition and/or value of winter ranges for mule deer. This index was designed to score mule deer winter range based upon several important vegetation components (i.e., preferred browse cover, shrub decadence, shrub young recruitment, cover of perennial grasses, cover of perennial forbs, cover of annual grasses and cover of noxious weeds). Although the index may be useful for assessing habitat for other species (i.e. sage grouse and elk), the rating system was devised to specifically address mule deer winter range requirements.

This index is used primarily to determine if a particular site has the vegetation components necessary to be a good winter range for mule deer. It can also be used to identify areas where habitat restoration projects may be needed and assist land managers in determining possible rehabilitation options. Because it does not take into account factors such as soil stability, hydrologic function, and other environmental factors, it should not be used to assess a sites function and/or condition as typically used by the Federal land management agencies. Desirable mule deer winter range provides 12-20% of preferred browse cover, 20% or less shrub decadency, and 10% or more of the shrub population is young. The herbaceous understory contains 8-15% perennial grasses cover, 5% perennial forb cover, and less than 5% annual grass cover.

Deer winter range Desirable Components Index (DCI) summary by year of Range Trend sites for WMU 2, Cache.

0%	1996	2001	2006	2011	2016
Excellent	0	0	2	2	2
Good-Excellent	1	1	1	0	0
Good	10	8	3	8	6
Fair-Good	1	3	5	1	2
Fair	2	5	5	3	4
Poor-Fair	1	1	0	1	1
Poor	2	0	3	4	3
Very Poor-Poor	3	2	2	1	1
Very Poor	14	13	8	10	10

Current Population Status

Year	Buck Harvest	Post-Season F/100 D	Post-Season Buck/100 D	Post-Season Population	Population Objective	% of Objective
2014	1,663	61	19	17,300	25,000	69%
2015	1,871	64	20	19,500	25,000	78%
2016	1,949	65	15	18,800	25,000	75%

Duration of Plan

This unit management plan was approved by the Wildlife Board on _____ and will be in effect for five years from that date, or until amended.

Literature Cited

Austin, D.D. 1992. A Handbook for Utah Hunters and Landowners. Great Basin Naturalist 52:364-372.

Clements, C.D. and J.A. Young. 1997. A viewpoint: Rangeland health and mule deer habitat. Journal of Range Management 50:129-138.

DEER HERD UNIT MANAGEMENT PLAN
Deer Herd Unit # 3
(Ogden)
October 2017

BOUNDARY DESCRIPTION

Weber, Box Elder, Cache, and Morgan counties - Boundary begins at Hyrum and SR-101; east on SR-101 to the Ant Flat Road (at Hardware Ranch); south on this road to SR-39; west on SR-39 to SR-167 (Trappers Loop Road); south on SR-167 to I-84; west on I-84 to I-15; north on I-15 to Exit 364 and U.S.-91: northeast on US-91 to SR-101; east on SR-101 to Hyrum.

LAND OWNERSHIP

RANGE AREA AND APPROXIMATE OWNERSHIP*

	Yearlong range		Summer Range		Winter Range	
Ownership	**Area (acres)**	**%**	**Area (acres)**	**%**	**Area (acres)**	**%**
Forest Service	0	--	19,859	10%	12,011	9%
Bureau of Land Management	0	--	0	0%	76	<1%
Utah State Institutional Trust Lands	0	--	8,216	5%	0	0%
Native American Trust Lands	0	--	0	0%	0	0%
Private	0	--	139,478	70%	112,589	80%
Department of Defense	0	--	0	0%	5	<1%
USFWS Refuge	0	--	0	0%	0	0%
National Parks	0	--	0	0%	0	0%
Utah State Parks	0	--	0	0%	20	<1%
Utah Division of Wildlife Resources	0	--	30,516	15%	15,206	11%
TOTAL	0	--	198,069	100%	139,907	100%

UNIT MANAGEMENT GOALS

Manage for a population of healthy animals capable of providing a broad range of recreational opportunities, including hunting and viewing. Balance deer herd impacts on human needs, such as private property rights, agricultural crops and local economies. Maintain the population at a level that is within the long-term capability of the available habitat to support.

POPULATION MANAGEMENT OBJECTIVES

< Target Winter Herd Size – Maintain a target population size of 11,000 wintering deer. This population objective remains for both the short-term (5 year life of this plan) and long term, barring significant changes in range conditions.

< Herd Composition – Maintain a minimum 3-year average postseason buck to doe ratio of 18-20:100 in accordance with the statewide plan.

	Unit 3
2006-2013 Objective:	11,000
2013-2018 Objective:	11,000
2018-2023 Objective:	11,000
Change:	0

POPULATION MANAGEMENT STRATEGIES

Monitoring

Population Size - Utilizing harvest data, postseason and spring classifications and mortality estimates, a computer model will be used to estimate winter population size. Annual mortality will be estimated based on survival of radio collared animals on a nearby representative unit.

Buck Age Structure - Estimates of the age class structure of the buck population will be determined primarily (directly) through the use of hunter harvested bucks at checking stations and field bag checks, and secondarily (indirectly) using post-season classification observations.

Harvest - The primary technique used to estimate harvest over the unit is the statewide uniform harvest surveys.

Limiting Factors (May prevent achieving management objectives)

Crop Depredation - Address depredation issues as prescribed by state law and DWR policy. Some geographic populations may be maintained at lower levels due to conflicts with crop production and private landscapes.

Habitat – Winter range condition is the major limiting factor on the Ogden unit. Range condition is currently poor due to past fires, and competition from introduced weedy species. Excessive habitat utilization will be addressed by antlerless harvests.

Predation - Consistently high fawn/doe ratios seem to indicate that predation is not a primary limiting factor for deer on the Ogden unit. Coyote removal through a bounty system is currently underway and future fawn/doe ratios will be used to determine if the removal was effective.

Highway Mortality - Cooperate with the Utah Dept. of Transportation in construction of highway fences, passage structures and warning signs.

Illegal Harvest, Crippling Loss, Disease and Parasites - Although poaching losses appear insignificant on the Ogden Unit, due primarily to a highly visible law enforcement effort, crippling losses are a concern, especially under buck-only hunting. Hunter survey studies (Austin, D.D. 1992. Great Basin Naturalist 52:364-372) suggests as many as 18 deer may be left in the field per 100 hunters. Disease is very difficult to evaluate, but high mortality is often associated with malnutrition and disease. The animal disease diagnostic facility associated with Utah State University acts as the laboratory to identify disease problems. Chronic Wasting disease is of further concern though it has not yet been detected on the unit. Surveillance has been implemented and will continue by testing hunter-harvested animals as well as targeted surveillance of symptomatic animals.

Urban Deer - Continued development across this Unit has lead to an increase in nuisance deer complaints. The Urban Deer Control Rule, R657-65, will be used to help municipalities address urban deer issues. Additional hunting opportunities outside of municipal boundaries will also be used to address nuisance complaints.

HABITAT

Habitat Description

The Ogden Management Unit is located within Weber, Cache, Box Elder, and Morgan counties. Municipalities located within or along the unit boundaries include: Hyrum, Wellsville, Mantua, Perry, Willard, Ogden, Mountain Green and Huntsville. The major drainages are the Little Bear River, Ogden River and Box Elder Creek. Smaller drainages are Davenport Creek, Paradise Dry Canyon, Hyrum Dry Canyon, Hyrum Green Canyon, Perry Canyon and Willard Canyon. The topography is steep and rough on the western face of the Wasatch Mountains above Willard, Perry, Ogden, east of Avon and Paradise, and more gentle in-between.

Elevation ranges from 4,400 feet near Willard to 9,764 feet on Willard Peak with approximately 139,907 acres of deer winter range and 198,069 acres of summer range in the unit. A majority of the winter range (80%) and summer range (70%) is on private land. The U.S. Forest Service administers 10% of the summer range and 9% of the winter range. The Division of Wildlife Resources maintains 15% of the deer summer range and 11% of the winter range on the unit. Major deer wintering areas are found between 4,600 feet and 7,000 feet on the Wasatch face above Willard and Perry; between 5,100 to 7,000 feet north and east of Mantua Reservoir; from 5,600 to 7,000 feet in Threemile Canyon; and between 5,400 and 7,000 feet along the slopes on the southeast side of Cache Valley above Paradise and Avon. During severe winters, snow restricts deer use to Threemile Canyon, the East Fork of the Little Bear River, the area south of Porcupine Reservoir, Paradise Dry Canyon, Hyrum Dry Canyon, Perry Canyon and the southeast corner of the unit south of Willard (King and Muir 1971). In addition, deer winter regularly in the Middle Fork and South Fork drainages of Ogden Valley, and on foothills from Brigham Face to Weber Canyon.

Habitat Concerns

Mule deer habitat on the Ogden Unit is fairly abruptly divided between summer range and winter range. The summer range is mostly at higher elevations. Summer range habitat concerns are mainly the loss of aspen stands due to conifer encroachment and the continued expansion and development of summer home and subdivisions in the Monte Cristo, Ant Flat and Powder Mountain areas.

Lower elevation winter range is the major limiting factor for mule deer populations on the Ogden Unit. The winter range areas are also those areas that are most at risk to vegetative changes and development. The largest threat to mule deer habitat in the Ogden Valley areas is the direct loss of crucial winter range acres due to development and urbanization.. Most of the increase in home building is occurring on the foothills in what was historic deer winter range.

Additional threats and losses to deer winter range is the reduction in habitat quality due to the loss of

critical browse species (sagebrush, bitterbrush, etc.). This loss has been attributed to a number of factors, fire, agriculture, drought etc. However, the abundance of weedy annual grass species, and the increase of the exotic, weedy, perennial grass, and bulbous bluegrass are also a likely causes of sagebrush decline. These weedy species can form dense mats of cover that compete with seedling and young sagebrush plants, which limits establishment of new sagebrush plants into the population. As the sagebrush population matures, decadence increases and density decreases as old plants begin to die. Annual grass species such as cheatgrass can also increase fuel loads and increase the chance of a catastrophic fire event.

Mule deer winter range habitat has seen a decrease in sagebrush density. Causes of sagebrush decline are varied and multiple causes may have compounded effects on the low potential studies in this unit. The moderate drought in recent years has likely caused increased stress on plants, and negatively impacted them. Sagebrush age structure across the area is generally old and one age class. The lack of regeneration of the stand through establishment of young sagebrush is a concern. Annual grass species are present but not prevalent through most of the areas. However, the range trend does show increases of weedy species such as cheatgrass and bulbous bluegrass in many of the low potential studies in this unit. Perennial grass and forb species have increased on many of the studies as browse species decline, and may compete with browse establishment.

Habitat Management

Loss of critical winter ranges to development is the highest cause of loss of mule deer habitat in the Ogden unit. The loss of sagebrush and other browse species on the remaining winter range is important when considering habitat quality. Contributing factors to the loss of browse species such as the impact of the increase in weedy species, particularly annual grasses, lack of browse regeneration and other variables are all of a concern in the habitat management of the Ogden Unit.

To address the direct loss of habitat, efforts will be made towards the protection and conservation of remaining mule deer habitat. Efforts must be made to work with counties, cities, private landowners and federal agencies to maintain and protect critical and existing winter range from future losses. Through existing partnerships and developing new conservation partners efforts are being made to identify and prioritize critical habitat areas. Conservation easements will be an important part of this effort. Other conservation efforts are ongoing throughout the unit.

To address habitat quality and degradation, habitat improvement projects have been and will continue to be planned throughout the unit. Habitat projects have been and are being done on UDWR Wildlife Management Areas, and private lands throughout the unit. The habitat projects are designed to address the specific issues within each project area. Recent past projects have included annual grass control and shrub plantings on the Middle Fork WMA. Other areas targeted for habitat projects within the unit over the next three to four years include Middle Fork and Brigham Face WMA winter range rehabilitation and enhancement through scalping and hand planting browse species.

PERMANENT RANGE TREND SUMMARIES

Purpose of Range Trend Studies

The ability to detect changes in vegetation composition (range trend) on big game winter ranges is an important part of the Division's big game management program. The health and vigor of big game populations are closely correlated to the quality and quantity of forage in key areas. The majority of the permanent range trend studies are located on deer and elk winter ranges. Range trend data are used for habitat improvement planning purposes.

Objective -

Monitor, evaluate, and report range trend at designated key areas throughout the state, and inform Division biologists, public land managers, and private landowners of significant changes in plant community composition in these areas.

Expected Results and Benefits
Range trend studies are resurveyed every five years, and vegetation condition and trend assessments are made for key areas.

Summary and Excerpts of 2016 Range Trend Result

Unit 3 Ogden

Range Trend studies have been sampled within WMU 3 on a regular basis since 1984, with studies being added or suspended as was deemed necessary. Due to changes in sampling methodologies, only data collected following the 1992 sample year is included in this summary. Monitoring studies of WRI projects began in 2004, when possible. WRI monitoring studies are established prior to treatment and sampled on a regular basis following treatment. Due to the long-term nature of the studies, many of the Range Trend and WRI studies have had some sort of disturbance or treatment prior to or since study establishment.

Deer Winter Range Condition Assessment

The condition of deer winter range within the Ogden management unit has continually changed on the sites sampled since 1996. The Range Trend sites sampled within the unit are considered to be in very poor to fair-good condition as of the 2016 sample year. Clay Valley went from good to fair-good condition and Middle Fork went from fair to poor condition. The NE Mantua Reservoir, Anderson Ranch, Threemile Canyon, and Geertsen Canyon studies are considered to be in very poor or very poor-poor condition generally due to the lack of browse cover, sagebrush diversity, and/or presence of annual grasses. The treated study sites range from very poor to very poor-poor. The treated study sites, NE Mantua Reservoir and Anderson Ranch, are also considered to be Range Trend sites and are therefore discussed above. Given more time and continual monitoring, it is possible that these sites might improve.

Desirable Components Index: The desirable components index (DCI) for deer was created as a tool to address condition and/or value of winter ranges for mule deer. This index was designed to score mule deer winter range based upon several important vegetation components (i.e., preferred browse cover, shrub decadence, shrub young recruitment, cover of perennial grasses, cover of perennial forbs, cover of annual grasses and cover of noxious weeds). Although the index may be useful for assessing habitat for other species (i.e. sage grouse and elk), the rating system was devised to specifically address mule deer winter range requirements.

This index is used primarily to determine if a particular site has the vegetation components necessary to be a good winter range for mule deer. It can also be used to identify areas where habitat restoration projects may be needed and assist land managers in determining possible rehabilitation options. Because it does not take into account factors such as soil stability, hydrologic function, and other environmental factors, it should not be used to assess a sites function and/or condition as typically used by the Federal land management agencies. Desirable mule deer winter range provides 12-20% of preferred browse cover, 20% or less shrub decadency, and 10% or more of the shrub population is young. The herbaceous understory contains 8-15% perennial grasses cover, 5% perennial forb cover, and less than 5% annual grass cover.

Deer Desirable Components Index (DCI): The mid-level potential deer DCI has remained fairly stable since 1996, with rankings ranging from poor to poor-fair throughout the sample years. Attributes of preferred browse species have decreased slightly since 1996, but perennial grass cover has increased and annual grass cover has decreased.

Deer winter range Desirable Components Index (DCI) summary by year of Range Trend sites for WMU 3, Ogden

	1996	2001	2006	2011	2016
Good	0	2	0	1	0
Fair-Good	1	0	1	0	1
Fair	3	2	2	2	0
Poor-Fair	0	1	0	1	0
Poor	2	1	1	0	1
Very Poor-Poor	0	0	1	0	2
Very Poor	2	2	1	2	2

Number of Study Sites

More detailed information regarding Range Trend data, results, trends, tables and summaries can be found at the Utah's Big Game Range trend Studies web site at https://wildlife.utah.gov/range-trend.html

Current Population Status

Year	Buck Harvest	Post-Season F/100 D	Post-Season Buck/100 D	Post-Season Population	Population Objective	% of Objective
2014	711	69	18	8,500	11,000	77%
2015	805	63	25	9,700	11,000	88%
2016	929	57	21	9,400	11,000	85%

Duration of Plan

This unit management plan was approved by the Wildlife Board on _____ and will be in effect for five years from that date, or until amended.

DEER HERD UNIT MANAGEMENT PLAN
Deer Herd Unit # 4
(Morgan-South Rich)
October 2017

BOUNDARY DESCRIPTION

Morgan, Rich, Summit and Weber counties – Boundary begins at the junction of I-80 and I-84 near Echo, Utah; east on I-80 to the Utah-Wyoming State line; north along this State line to SR-16; north on SR-16 to SR39 near Woodruff, Utah; west along SR-39 to SR-167 (Trappers Loop Road); south on SR-167 to SR-30 at Mountain Green, Utah; west on SR-30 to I-84; east on I-84 to I-80.

LAND OWNERSHIP

RANGE AREA AND APPROXIMATE OWNERSHIP*

	Yearlong range		Summer Range		Winter Range	
Ownership	**Area (acres)**	**%**	**Area (acres)**	**%**	**Area (acres)**	**%**
Forest Service	0	0%	35,429	9%	3,217	2%
Bureau of Land Management	8,142	19%	4,695	1%	15,803	9%
Utah State Institutional Trust Lands	701	2%	5,876	2%	4,967	3%
Native American Trust Lands	0	0%	0	0%	0	0%
Private	34,386	79%	322,364	86%	133,812	80%
Department of Defense	0	0%	0	0%	0	0%
USFWS Refuge	0	0%	0	0%	0	0%
National Parks	0	0%	0	0%	0	0%
Utah State Parks	0	0%	0	0%	0	0%
Utah Division of Wildlife Resources	37	<1%	6,084	2%	11,322	6%
TOTAL	43,266	100%	374,448	100%	169,121	100%

UNIT MANAGEMENT GOALS

Manage for a population of healthy animals capable of providing a broad range of recreational opportunities, including hunting and viewing. Balance deer herd impacts on human needs, such as private property rights, agricultural crops and local economies. Maintain the population at a level that is within the long-term capability of the available habitat to support.

POPULATION MANAGEMENT OBJECTIVES

Target Winter Herd Size – Maintain a target population size of 18,000 wintering deer. This population objective remains both the short-term (5 year life of this plan) and long term, barring significant changes in range conditions.

Herd Composition – Maintain a minimum 3-year average postseason buck to doe ratio of 18-20:100 in accordance with the statewide plan.

Unit 4

1994-2003 Objective:	10,750
2003 Objective:	12,500
2003-2013 Objective:	12,000
2013-2018 Objective:	18,000
2018-2023 Objective:	18,000

POPULATION MANAGEMENT STRATEGIES

Monitoring

Population Size - Utilizing harvest data, postseason and spring classifications and mortality estimates, a computer model will be used to estimate winter population size. Annual mortality will be estimated based on survival of radio collared animals on a nearby representative unit.

Buck Age Structure - Estimates of the age class structure of the buck population will be determined primarily (directly) through the use of hunter harvested bucks at checking stations and field bag checks, and secondarily (indirectly) using post-season classification observations.

Harvest - The primary technique used to estimate harvest over the unit is the statewide uniform harvest surveys.

Limiting Factors (May prevent achieving management objectives)

Crop Depredation - Address depredation issues as prescribed by state law and DWR policy. Some geographic populations may be maintained at lower levels than the range can support due to conflicts with crop production and private landscapes.

Habitat – Winter range condition is the major limiting factor on the Morgan-South Rich unit. Conditions range from Poor to Good depending on where you are on the unit. Limiting factors include habitat loss and degradation, increasing ungulate populations, and reduced browse by competition from introduced weedy species. Excessive habitat utilization will be addressed by hunter harvest.

Predation - Consistently high fawn/doe ratios seem to indicate that predation is not a primary limiting factor for deer on the Morgan/South Rich WMU. Coyote removal through a bounty system is currently underway and future fawn/doe ratios will be used to determine if the removal was effective.

Highway Mortality - Cooperate with the Utah Dept. of Transportation in construction of highway fences, passage structures and warning signs.

Illegal Harvest, Crippling Loss, Disease and Parasites - Although poaching losses appear insignificant on the Morgan-South Rich Unit, due primarily to a highly visible law enforcement effort, crippling losses are a concern, especially under buck-only hunting. Disease is very difficult to evaluate, but high mortality is often associated with disease and malnutrition. The animal disease diagnostic facility associated with Utah State University acts as the laboratory to identify disease problems. Chronic Wasting disease is of

further concern though it has not yet been detected on the unit. Surveillance will be implemented by testing hunter harvested animals as well as targeted surveillance of symptomatic animals.

Urban Deer - Continued development across this Unit has lead to an increase in nuisance deer complaints. The Urban Deer Control Rule, R657-65, will be used to help municipalities address urban deer issues. Additional hunting opportunities outside of municipal boundaries will also be used to address nuisance complaints.

HABITAT

Habitat Description

The Morgan-South Rich Management Unit 4 incorporates a section of Weber County southeast of Huntsville, the northern halves of Morgan and Summit counties, and the southern portion of Rich County southwest of Woodruff. The unit is dominated by private land in both summer and winter range areas.
Most deer winter range is located in the major drainages and on the slopes north of the Weber River. A detached, smaller wintering area is found on the south-facing slopes above Cottonwood Creek. These areas are becoming highly developed. Highways I-80 and I-84, which run through Echo Canyon and along the Weber River, form the unit's southern boundary. There are several towns along the highways. Surrounding Croydon, the majority of the Lost Creek bottoms have been converted to alfalfa fields. Two areas of land in the unit are managed by the Division of Wildlife Resources. The Round Valley WMA is north of I-84, just east of Morgan. The Henefer-Echo WMA is located east of Henefer and is managed primarily as a big game habitat. Controlled grazing, vehicle restrictions, and revegetation projects are major management tools in this area.

Earlier inventory studies described six vegetation types. The sagebrush type is most common and is found over the whole area. It forms part of a continuum, based on moisture conditions, between the mountain browse/sagebrush and mountain browse types. The lower elevation sagebrush and mountain browse/sagebrush types are productive and utilized heavily by deer, while the mountain browse type mostly provides cover and is unavailable in many winters. The other vegetation types occupy comparatively little area, but have the potential to increase. Burns occur frequently in the unit and, unless seeded, production of desirable species is very low. Deer use the burned areas infrequently, possibly because of lack of cover. A small population of mahogany is in Cottonwood Canyon, but it is important to wintering deer. The scattered juniper areas are also important in providing thermal cover, but provide little forage.

In severe winters, the area of available winter range is greatly reduced. The upper limit is 6,500 feet on most of the unit. The available acreage of all vegetation types, except agricultural land, is reduced during severe winters. All range trend studies in the unit were established on winter range. Most studies sample crucial and/or heavily used areas.

The Lost Creek, Weber River, and Echo Canyon areas are traditional deer wintering areas. There is considerable migration both from higher elevations in the unit and from other herd units to this area, especially during severe winters. The largest numbers of deer probably come from the East Canyon Unit, where deer summer on the east side of the Wasatch Mountains. Development in Morgan Valley is disrupting this migration route. Deer also come from the Ogden and Chalk Creek units which also have adequate summer range, but limited winter range.

Habitat Concerns

The summer mule deer habitat is mostly at higher elevations across the unit. Many deer summer on the adjacent East Canyon, Chalk Creek and Ogden units.

Lower elevation winter range is the major limiting factor for mule deer populations on the Morgan-South South-Rich Unit. The winter range areas are also those areas that are most at risk. Development and

urbanization continues to be an ever increasing issue. Habitat loss in the Morgan County area is due to increased urbanization and home development. Most of the increase in home building is occurring on the foothills in what was historic deer winter range. More wide spread habitat concerns on the Morgan-South Rich Unit is the reduction in habitat quality due to the loss of critical browse species (sagebrush, bitterbrush etc). This loss has been attributed to a number of factors, fire, agriculture, drought etc. However, the abundance of weedy annual grass species, and the increase of the exotic, weedy, perennial grass bulbous bluegrass are the more likely causes of sagebrush decline. With the majority of the unit being private lands, conversion of browse to grass for cattle grazing has been a long standing effort. The grasses and other weedy species can form dense mats of cover that compete with seedling and young sagebrush plants, which limits establishment of new sagebrush plants into the population. As the sagebrush population matures, decadence increases and density decreases as old plants begin to die. Annual grass species such as cheat-grass can also increase fuel loads and increase the chance of a catastrophic fire event. One of the factors in re-establishment of browse species is dealing with an overabundance of introduced perennial grass species such as crested wheatgrass and intermediate wheatgrass. Due to grazing practices, the grasses tend to dominate an aggressively grazed area where they are present. dealing with the perennials with herbicide seems to limit competition and aids in browse establishment. This challenge needs to be dealt with on projects where these grasses are present.

In addition to the continual stresses put on the winter range by development and loss of browse species to invasive weeds, elk are pioneering into available winter range increasing the threat of over use of available forage. As space that is available for winter habitat is reduced, overuse of available resources on remaining winter range is threatened to over browsing. This can lead to future concerns in health and productivity of vegetative browse species available on the winter range. In heavy winter years, these ranges may be over utilized by ungulate populations and may lead to higher winter mortality from malnutrition during years of heavy snow accumulation.

The Rich area of the Morgan-South Rich Unit shares the same summer range as the Cache area. The area around Randolph and Woodruff has not experienced significant development and is not likely to in the future.

Mule deer winter range habitat has seen a decrease in sagebrush density. Causes of sagebrush decline are varied and multiple causes may have compounded effects on the low potential studies in this unit. The moderate drought in recent years has likely caused increased stress on plants, and negatively impacted them. Sagebrush age structure across the area is generally old and one age class. The lack of regeneration of the stand through establishment of young sagebrush is a concern. Annual grass species are present but not prevalent through most of the areas. However, the range trend does show increases of weedy species such as cheat-grass and bulbous bluegrass in many of the low potential studies in this unit. Perennial grass and forb species have increased on many of the studies as browse species decline, and may compete with browse establishment. Grazing practices have an impact on browse species recruitment, both positive and negative. Working with private landowners and federal agencies to promote positive grazing practices that are appropriate to specific areas will be beneficial for browse re-establishment and enhancement. A diverse browse component is essential to healthy and productive winter mule deer habitat.

Crucial mule deer habitat in some areas on the Morgan-South Rich Unit is also being lost and degraded through Juniper expansion. In certain areas where juniper stands occur, the spread and invasion of young juniper have had a dramatic negative impact on existing browse and other understory species

Habitat Management

Loss of critical winter ranges to development is the highest cause of loss of mule deer habitat in the Morgan/South Rich Unit. The loss of sagebrush and other browse species on the remaining winter range is important when considering habitat quality. Contributing factors to the loss of browse species such as the impact of the increase in weedy species, particularly annual grasses, juniper expansion, lack of browse regeneration and other variables are all of a concern in the habitat management of the Morgan/South Rich Unit.

To address the direct loss of habitat, efforts will be made towards the protection and conservation of remaining mule deer habitat. Efforts must be made to work with counties, cities, private landowners and federal agencies to maintain and protect critical and existing winter range from future losses. Through existing partnerships and developing new conservation partners efforts are being made to identify and prioritize critical habitat areas. Efforts to develop conservation easements and possible DWR acquisitions is important to maintain critical habitat for mule deer. Conservation easements will be an important part of this effort. Other conservation efforts are ongoing throughout the unit.

To address habitat quality and degradation, habitat improvement projects have been and will continue to be planned throughout the unit. Habitat projects have been and are being done on UDWR Wildlife Management Areas, and private lands throughout the unit. The habitat projects are designed to address the specific issues within each project area. Recent past projects have included annual grass control and shrub plantings on the Henefer/Echo WMA.

Habitat projects addressing the encroachment of Juniper are critical to maintaining and increasing winter mule deer habitat. Tools such as chaining, bullhog, lop and scatter and tebuthiron (an herbicide) should be utilized in areas where they would be most beneficial. Planting of browse species such as black (*Artemsia nova),* Wyoming (*Artemesia tridentata Wyomingensis*) and Mountain (*Artemesia tridentata vaseyana*) sagebrush, Antelope Bitterbrush (*Purshia tridentata*) and Mountain Mahogany (*Cercocarpus ledifolious, Cercocarpus montanus)* are critical and should be used where the ecological site descriptions dictate their use.

The following are some of the areas that have been targeted for habitat projects within the unit over the next five years.

- Henefer/Echo WMA winter range rehabilitation and enhancements through scalping and hand planting browse species.
- Juniper removal on winter range in Rich county.

PERMANENT RANGE TREND SUMMARIES

Purpose of Range Trend Studies

The ability to detect changes in vegetation composition (range trend) on big game winter ranges is an important part of the Division's big game management program. The health and vigor of big game populations are closely correlated to the quality and quantity of forage in key areas.

The majority of the permanent range trend studies are located on deer and elk winter ranges. Range trend data are used for habitat improvement planning purposes.

Objective

Monitor, evaluate, and report range trend at designated key areas throughout the state, and inform Division biologists, public land managers, and private landowners of significant changes in plant community composition in these areas.

Expected Results and Benefits

Range trend studies are resurveyed every five years, and vegetation condition and trend assessments are made for key areas.

Summary and Excerpts of 2016 Range Trend Result

Unit 4 Morgan/South Rich

Range Trend studies have been sampled within WMU 4 on a regular basis since 1984, with studies being added or suspended as was deemed necessary. Due to changes in sampling methodologies, only data collected following the 1992 sample year is included in this summary. Monitoring studies of WRI projects began in 2004, when possible; WRI monitoring studies are established prior to treatment and sampled on a regular basis following treatment. Due to the long-term nature of the studies, many of the Range Trend and WRI studies have had some sort of disturbance or treatment prior to or since study establishment.

Deer Winter Range Condition Assessment

The condition of deer winter range within the Morgan-South Rich Management Unit has continually changed on the sites sampled since 1996. The Range Trend sites sampled within the unit are considered to be in very poor to good condition as of the 2016 sample year. Shell Hollow improved from very poor-poor to poor condition, Echo Canyon and Tank Canyon remained in poor condition, and Scott Rees Ranch and Wheatgrass Hollow improved from fair to good condition. Heiner's Creek and Chapman Canal remained in good condition, Deseret Main Gate went from good to fair condition, and Woodruff Creek South went from fair to poor. Finally, the Owen's Canyon, Deseret Burn, Harris Canyon, and Above Toon Ranch studies are considered to be in very poor-poor condition generally due to the lack of browse cover, sagebrush diversity, and the presence of annual grasses. The treated study sites range from very poor to good. The treated sites have generally improved as time since treatment has increased; the exception to this is the Claypit South Slope study which has remained in very poor condition. Tank Canyon, Owen's Canyon, and Deseret Burn are also considered to be Range Trend sites and are discussed above. Harris Canyon Dixie was sampled prior to treatment and was in very poor condition. Claypit North Slope improved from fair-good to good and Croydon Cemetery remained in fair condition. It is possible given more time and continual monitoring that these sites will (continue to) improve.

Desirable Components Index: The desirable components index (DCI) for deer was created as a tool to address condition and/or value of winter ranges for mule deer. This index was designed to score mule deer winter range based upon several important vegetation components (i.e., preferred browse cover, shrub decadence, shrub young recruitment, cover of perennial grasses, cover of perennial forbs, cover of annual grasses and cover of noxious weeds). Although the index may be useful for assessing habitat for other species (i.e. sage grouse and elk), the rating system was devised to specifically address mule deer winter range requirements.

This index is used primarily to determine if a particular site has the vegetation components necessary to be a good winter range for mule deer. It can also be used to identify areas where habitat restoration projects may be needed and assist land managers in determining possible rehabilitation options. Because it does not take into account factors such as soil stability, hydrologic function, and other environmental factors, it should not be used to assess a sites function and/or condition as typically used by the Federal land management agencies. Desirable mule deer winter range provides 12-20% of preferred browse cover, 20% or less shrub decadency, and 10% or more of the shrub population is young. The herbaceous understory contains 8-15% perennial grasses cover, 5% perennial forb cover, and less than 5% annual grass cover.

Deer winter range Desirable Components Index (DCI) summary by year of Range Trend sites for WMU 4, Morgan-South Rich.

	1996	2001	2006	2011	2016
Excellent	0	0	1	0	0
Good	2	5	2	3	4
Fair-Good	1	0	1	0	0
Fair	3	4	1	3	1
Poor-Fair	2	2	1	0	0
Poor	2	1	4	4	4
Very Poor-Poor	1	0	2	1	2
Very Poor	3	2	1	2	2

Number of Study Sites

More detailed information regarding Range Trend data, results, trends, tables and summaries can be found at the Utah's Big Game Range trend Studies web site at https://wildlife.utah.gov/range-trend.html

CURRENT POPULATION STATUS

Year	Buck Harvest	Post-Season F/100 D	Post-Season Buck/100 D	Post-Season Population	Population Objective	% of Objective
2013	815	50	27	15,300	18,000	85%
2014	888	67	33	15,500	18,000	86%
2015	923	62	42	18,100	18,000	101%
2016	997	61	33	15,900	18,000	88%

Duration of Plan

This unit management plan was approved by the Wildlife Board on _____ and will be in effect for five years from that date, or until amended.

DEER HERD UNIT MANAGEMENT PLAN
Deer Herd Unit # 5
(East Canyon)
October 2017

BOUNDARY DESCRIPTION

Morgan, Summit, Salt Lake and Davis counties – Boundary begins at the junction of I-80 and I-84 (Echo Junction); southwest on I-80 to I-15; north on I-15 to its junction with I-84 near Ogden; east on I-84 to Echo Junction and I-80.

LAND OWNERSHIP

RANGE AREA AND APPROXIMATE OWNERSHIP*

	Yearlong range		Summer Range		Winter Range	
Ownership	**Area (acres)**	**%**	**Area (acres)**	**%**	**Area (acres)**	**%**
Forest Service	561	14%	45,802	19%	18,626	21%
Bureau of Land Management	0	0%	173	<1%	314	<1%
Utah State Institutional Trust Lands	0	0%	754	1%	59	<1%
Native American Trust Lands	0	0%	0	0%	0	0%
Private	3,516	86%	188,243	79%	65,865	75%
Department of Defense	0	0%	193	<1%	773	1%
USFWS Refuge	0	0%	0	0%	0	0%
National Parks	0	0%	0	0%	0	0%
Utah State Parks	0	0%	0	0%	840	1%
Utah Division of Wildlife Resources	0	0%	2296	<1%	1,273	2%
TOTAL	4,077	100%	237,461	100%	87,750	100%

UNIT MANAGEMENT GOALS

Manage for a population of healthy animals capable of providing a broad range of recreational opportunities, including hunting and viewing. Balance deer herd impacts on human needs, such as private property rights, agricultural crops and local economies. Maintain the population at a level that is within the long-term capability of the available habitat to support.

POPULATION MANAGEMENT OBJECTIVES

Target Winter Herd Size – Maintain a target population size of 13,500 wintering deer. This population objective remains for both the short-term (5 year life of this plan) and long term, barring significant changes in range conditions.

Herd Composition – Maintain a minimum 3-year average postseason buck to doe ratio of 18-20:100 in accordance with the statewide plan.

Unit 5

1994-2003 Objective:	9,500
2003 Objective:	8,500
2003-2013 Objective:	7,000
2013-2018 Objective:	13,500
2018-2023 Objective:	13,500

POPULATION MANAGEMENT STRATEGIES

Monitoring

Population Size - Utilizing harvest data, postseason and spring classifications and mortality estimates, a computer model will be used to estimate winter population size. Annual mortality will be estimated based on survival of radio collared animals on a nearby representative unit.

Buck Age Structure - Estimates of the age class structure of the buck population will be determined primarily (directly) through the use of hunter harvested bucks at checking stations and field bag checks, and secondarily (indirectly) using post-season classification observations.

Harvest - The primary technique used to estimate harvest over the unit is the statewide uniform harvest surveys.

Limiting Factors (May prevent achieving management objectives)

Crop Depredation - Address depredation issues as prescribed by state law and DWR policy. Some geographic populations may be maintained at lower levels due to conflicts with crop production and private landscapes.

Habitat – Winter range condition is the major limiting factor on the East Canyon Unit. Range condition is currently ranked as fair due to a reduction of browse and competition from introduced weedy species. Excessive habitat utilization will be addressed by antlerless harvests.

Predation - Consistently high fawn/doe ratios seem to indicate that predation is not a primary limiting factor for deer on the East Canyon WMU. Coyote removal through a bounty system is currently underway and future fawn/doe ratios will be used to determine if the removal was effective.

Highway Mortality - Cooperate with the Utah Department of Transportation in construction of highway fences, passage structures and warning signs.

Illegal Harvest, Crippling Loss, Disease and Parasites - Although poaching losses appear insignificant on the East Canyon Unit, due primarily to a highly visible law enforcement effort, crippling losses are a concern, especially under buck-only hunting. Hunter survey studies (Austin, D.D. 1992. Great Basin Naturalist 52:364-372) suggests as many as 18 deer may be left in the field per 100 hunters. Disease is very difficult to evaluate, but high mortality in the spring is often associated with disease and malnutrition. The animal disease diagnostic facility associated with Utah State University acts as the laboratory to identify disease problems. Chronic Wasting disease is of further concern though it has not been detected on the unit. Surveillance has been implemented and will continue by testing hunter harvested animals as well as targeted surveillance of symptomatic animals.

Urban Deer - Continued development across this Unit has lead to an increase in nuisance deer complaints. The Urban Deer Control Rule, R657-65, will be used to help municipalities address urban deer issues. Additional hunting opportunities outside of municipal boundaries will also be used to address nuisance complaints.

HABITAT

Habitat Description

The East Canyon Management Unit is located mostly on the east side of the Wasatch Mountains. The topography varies across the unit from deep canyons and steep slopes in the western portion to more gentle open slopes and fewer cliffs in the east. Most of the unit is drained by the Weber River. Several creeks along the north and east edges of the unit drain directly into the river. The East Canyon Creek flows into the Weber River. East Canyon Reservoir is located approximately in the center of the unit. The highest elevations are along the western boundary on peaks of the Wasatch Range which reach above 9,500 feet. The lowest point is 4,800 feet in the northwest corner where the Weber River flows out of the unit.

The upper limit of normal winter range is generally considered to be about 7,000 feet. Winter range is found in the major drainages and around East Canyon Reservoir. All of the valleys have been developed for agriculture and housing. The major canyons, Weber and East canyons, contain housing developments and high-use roads. The northern, eastern, and southern boundaries are formed by Interstates 80 and 84. Other more narrow and higher elevation canyons have seasonal roads. The area is highly developed because a majority of the unit is private land. Not only is the quantity of winter range limited, but the quality is compromised by development and roads. Many deer that summer on the unit migrate over to the Davis County side of the unit (Wasatch Face) to winter. Winter migration into the unit from other areas is minimal.

Most of the winter range is comprised of sagebrush range types. The sagebrush type has a good mix of browse species and can provide substantial forage for wintering deer. This browse type, which is 20% of the total range, is composed mainly of big sagebrush, but also includes bitterbrush, service berry and Gambel oak. Other range types include agricultural lands.

Habitat concerns

Mule deer habitat on the East Canyon Unit is abruptly divided between summer range and winter range.

Lower elevation winter range is the major limiting factor for mule deer populations on the East Canyon Unit. The winter range areas are also those areas that are most at risk. A large threat to mule deer habitat on the East Canyon Unit is the direct loss of crucial winter range acres due to development and urbanization; Most of the increase in home building is occurring on the foothills in what was historic deer winter range on the Wasatch Face.

Additional threats and losses to deer winter range on the East Canyon unit is the reduction in habitat

quality due to the loss of critical browse species (sagebrush, bitterbrush etc). This loss has been attributed to a number of factors, fire, agriculture, drought etc. However, the abundance of weedy annual grass species, and the increase of the exotic, weedy, perennial grass bulbous bluegrass are the more likely causes of sagebrush decline. These weedy species can form dense mats of cover that compete with seedling and young sagebrush plants, which limits establishment of new sagebrush plants into the population. As the sagebrush population matures, decadence increases and density decreases as old plants begin to die.

The Wasatch Face area of the East Canyon Unit has endured major housing development in historic winter range. The majority of winter range has been converted, leaving wintering mule deer short on winter range on the face. To mitigate for this loss, winter habitat on the Wasatch Back needs to be improved to accommodate wintering big game. This is a challenge with the high percentages of winter range being privately held.

Mule deer winter range habitat has seen a decrease in sagebrush density. Causes of sagebrush decline are varied and multiple causes may have compounded effects on the low potential studies in this unit. The moderate drought in recent years has likely caused increased stress on plants, and negatively impacted them. Sagebrush age structure across the area is generally old and one age class. The lack of regeneration of the stand through establishment of young sagebrush is a concern. Annual grass species are present but not prevalent through most of the areas. However, the range trend does show increases of weedy species such as cheat-grass and bulbous bluegrass in many of the low potential studies in this unit. Perennial grass and forb species have increased on many of the studies as browse species decline, and may compete with browse establishment.

Habitat Management

Loss of critical winter ranges to development is the highest cause of loss of mule deer habitat in the East Canyon unit. The loss of sagebrush and other browse species on the remaining winter range is important when considering habitat quality. Contributing factors to the loss of browse species such as the impact of the increase in weedy species, particularly annual grasses, lack of browse regeneration and other variables are all of a concern in the habitat management of the unit.

To address the direct loss of habitat, efforts will be made towards the protection and conservation of remaining mule deer habitat. Efforts must be made to work with counties, cities, private landowners and federal agencies to maintain and protect critical and existing winter range from future habitat losses by development. Through existing partnerships and developing new conservation partners, efforts are being made to identify and prioritize critical habitat areas. Efforts to develop conservation easements and possible DWR acquisitions is important to maintain critical habitat for mule deer.

To address habitat quality and degradation, habitat improvement projects will be planned throughout the unit when possible. The East Canyon WMA has been identified for a vegetation project to enhance available food on winter range by scalping and hand planting browse species for mule deer.

PERMANENT RANGE TREND SUMMARIES

Purpose of Range Trend Studies

The ability to detect changes in vegetation composition (range trend) on big game winter ranges is an important part of the Division's big game management program. The health and vigor of big game populations are closely correlated to the quality and quantity of forage in key areas.

The majority of the permanent range trend studies are located on deer and elk winter ranges. Range trend data are used for habitat improvement planning purposes.

Objective

Monitor, evaluate, and report range trend at designated key areas throughout the state, and inform Division biologists, public land managers, and private landowners of significant changes in plant community composition in these areas.

Expected Results and Benefits
Range trend studies are resurveyed every five years, and vegetation condition and trend assessments are made for key areas.

Summary and Excerpts of 2016 Range Trend Result

Unit 5 East Canyon

Range Trend studies have been sampled within WMU 5 on a regular basis since 1983, with studies being added or suspended as was deemed necessary. Due to changes in sampling methodologies, only data collected following the 1992 sample year is included in this summary. Monitoring studies of WRI projects began in 2004, when possible; WRI monitoring studies are established prior to treatment and sampled on a regular basis following treatment. Due to the long-term nature of the studies, many of the Range Trend and WRI studies have had some sort of disturbance or treatment prior to or since study establishment.

Deer Winter Range Condition Assessment

The condition of deer winter range within the East Canyon management unit has continually changed since 1996. The Range Trend sites sampled within the unit (Tucson Hollow, Red Rock Canyon, East Canyon Reservoir, and Wanship) are considered to be in very poor condition as of the 2016 sample year: this is generally due to the high levels of annual grass and lack of preferred browse cover. There are no treated sites in this management unit. It is possible that with time and continued monitoring these sites will improve.

Desirable Components Index: The desirable components index (DCI) for deer was created as a tool to address condition and/or value of winter ranges for mule deer. This index was designed to score mule deer winter range based upon several important vegetation components (ie., preferred browse cover, shrub decadence, shrub young recruitment, cover of perennial grasses, cover of perennial forbs, cover of annual grasses and cover of noxious weeds). Although the index may be useful for assessing habitat for other species (ie. sage grouse and elk), the rating system was devised to specifically address mule deer winter range requirements.

This index is used primarily to determine if a particular site has the vegetation components necessary to be a good winter range for mule deer. It can also be used to identify areas where habitat restoration projects may be needed and assist land managers in determining possible rehabilitation options. Because it does not take into account factors such as soil stability, hydrologic function, and other environmental factors, it should not be used to assess a sites function and/or condition as typically used by the Federal land management agencies. Desirable mule deer winter range provides 12-20% of preferred browse cover, 20% or less shrub decadency, and 10% or more of the shrub population is young. The herbaceous understory contains 8-15% perennial grasses cover, 5% perennial forb cover, and less than 5% annual grass cover.

Deer winter range Desirable Components Index (DCI) summary by year of Range Trend sites for WMU 5, East Canyon.

	1996	2001	2006	2011	2016
Good	0	0	0	1	0
Fair-Good	1	1	0	0	0
Fair	0	2	3	2	0
Poor-Fair	0	1	0	0	0
Poor	2	1	0	0	0
Very Poor-Poor	0	1	1	1	0
Very Poor	3	1	2	1	4

Number of Study Sites

More detailed information regarding Range Trend data, results, trends, tables and summaries can be found at the Utah's Big Game Range trend Studies web site at https://wildlife.utah.gov/range-trend.html

Current Population Status

Year	Buck Harvest	Post-Season F/100 D	Post-Season Buck/100 D	Post-Season Population	Population Objective	% of Objective
2013	815	47	21	11,100	13,500	82%
2014	784	64	31	12,400	13,500	92%
2015	1,076	68	29	13,300	13,500	98%
2016	1,250	61	35	14,800	13,500	110%

Duration of Plan

This unit management plan was approved by the Wildlife Board on _____ and will be in effect for five years from that date, or until amended.

DEER HERD UNIT MANAGEMENT PLAN
Deer Herd Unit # 6
(Chalk Creek)
October 2017

BOUNDARY DESCRIPTION

Summit and **Duchesne** counties - Boundary begins at the junction of Interstates 84 and 80 near Echo; then northeast on I-80 to the Utah-Wyoming state line; south and east along this state line to Highway SR-150; south on SR-150 to Pass Lake and the Weber River Trail; west on this trail to Holiday Park and the Weber River road; west on this road to Highway SR-32; north and west on SR-32 to I-80 and Wanship; north on I-80 to I-84 near Echo.

LAND OWNERSHIP

RANGE AREA AND APPROXIMATE OWNERSHIP*

	Yearlong range		Summer Range		Winter Range	
Ownership	**Area (acres)**	**%**	**Area (acres)**	**%**	**Area (acres)**	**%**
U.S Forest Service	0	--	33,719	11%	91	.1%
U.S. Bureau of Land Management	0	--	507	.2%	324	.4%
Utah School and Institutional Trust Lands Administration	0	--	363	.1%	259	.3%
Native American Trust Lands	0	--	0	0%	0	0%
Private	0	--	271,558	88.7%	71,612	96%
U.S. Department of Defense	0	--	0	0%	0	0%
USFWS Refuge	0	--	0	0%	0	0%
National Park Service	0	--	0	0%	0	0%
Utah Division of Parks and Recreation	0	--	0	0%	131	.2%
Utah Division of Wildlife Resources	0	--	0	15%	2,044	3%
TOTAL	0	--	306,147	100%	139,907	100%

UNIT MANAGEMENT GOALS

Manage for a population of healthy animals capable of providing a broad range of recreational opportunities, including hunting and viewing. Balance deer herd impacts on human needs, such as private property rights, agricultural crops and local economies. Maintain the population at a level that is within the long-term capability of the available habitat to support.

POPULATION MANAGEMENT OBJECTIVES

< Target Winter Herd Size – Maintain a target population size of 10,500 wintering deer. This population objective remains for both the short-term (5 year life of this plan) and long term, barring significant changes in range conditions.

< Herd Composition – Maintain a minimum 3-year average postseason buck to doe ratio of 18-20:100 in accordance with the statewide plan.

Unit 6

1994-2005 Objective:	11,500
2006-2013 Objective:	10,500
2013-2018 Objective:	10,500
2018-2013 Objective:	10,500

The population objective was reduced in 2006 to account for loss of deer winter habitat due to residential and urban development.

POPULATION MANAGEMENT STRATEGIES

Monitoring

Population Size - Utilizing harvest data, postseason and spring classifications and mortality estimates, a computer model will be used to estimate winter population size. Annual mortality will be estimated based on survival of radio-collared animals on a nearby representative unit.

Buck Age Structure - Estimates of the age class structure of the buck population will be determined primarily (directly) through the use of hunter harvested bucks at checking stations and field bag checks, and secondarily (indirectly) using post-season classification observations.

Harvest - The primary technique used to estimate harvest over the unit is the statewide uniform harvest surveys.

Limiting Factors (May prevent the unit from achieving management objectives)

Crop Depredation - Address depredation issues as prescribed by state law and DWR policy. Some geographic populations may be maintained at lower levels than the range can support due to conflicts with crop production and private landscapes.

Habitat – Winter range condition is the major limiting factor on the Chalk Creek Unit. Winter and summer forage conditions, private land range availability and landowner acceptance will ultimately determine herd size. One factor that is potentially limiting is the increasing population and density of elk on the limited winter range. Elk numbers continue to increase on the unit and occupy and dominate what was once mule deer winter range. Excessive habitat utilization will be addressed by antlerless harvests.

Predation - Consistently high fawn/doe ratios seem to indicate that predation is not a primary limiting factor for deer on the Chalk Creek WMU. Coyote removal through a bounty system is currently underway and future fawn/doe ratios will be used to determine if the removal was effective.

Highway Mortality - UDWR has been working closely with the Utah Department. of Transportation to prevent WVC's (wildlife vehicle collisions) in this unit. Several areas have been previously identified as having high WVC's: the I-80 and SR-32 area (especially around Rockport Reservoir and the agricultural fields surrounding I-80 and the Weber River); the I-80 area around the Echo Junction and several miles to the north-east; and Hwy. 150. This agency cooperation has resulted the installation of 8' wildlife exclusion

fences, the construction of wildlife escape ramps (along I-80), and the inclusion of wildlife paths under the I-80 Weber River bridge. In addition, a consultant firm completed a wildlife mortality study for UDOT for I-80 from Salt Lake City to Echo Junction. This study identified additional fencing, escape ramp, and wildlife passage needs throughout the I-80 corridor.

Illegal Harvest, Crippling Loss, Disease and Parasites - Although poaching losses appear insignificant on the Chalk Creek Unit, due primarily to a highly visible law enforcement effort, crippling losses are a concern, especially under buck-only hunting. If illegal kills be identified as a significant source of mortality, specific preventative measures will be developed within the context of an Action Plan. This plan will be developed in cooperation with the Law Enforcement section.

Disease is very difficult to evaluate, but high mortality in the spring is often associated with disease and malnutrition. The animal disease diagnostic facility associated with Utah State University acts as the laboratory to identify disease problems. Chronic Wasting disease is of further concern although it has not yet been detected on the unit. Surveillance will continue to be implemented by testing hunter harvested animals as well as targeted surveillance of symptomatic animals.

Urban Deer - Continued development across this Unit has lead to an increase in nuisance deer complaints. The Urban Deer Control Rule, R657-65, will be used to help municipalities address urban deer issues. Additional hunting opportunities outside of municipal boundaries will also be used to address nuisance complaints.

HABITAT

Habitat Description

The Chalk Creek Management Unit has an estimated 74,461 acres of winter habitat and 306,147 acres of summer habitat for mule deer range. The majority of the range is privately owned (96% of the winter range, 89% of summer range). Widespread private ownership leads to numerous management complications. Development and loss of habitat due to other land disturbances are some of the biggest concerns to mule deer winter range. The discovery, development, and removal of oil throughout the unit, especially the Chalk Creek area, has led to increased road densities and scattered housing developments. New agricultural projects on crucial winter range also continue to increase depredation problems and further decrease the available big game habitat. Because of the preponderance of private land and the establishment of Cooperative Wildlife Management Areas (CWMU's) access is severely restricted for public hunting on large areas.

The topography of the unit is influenced mainly by the Uinta Mountains to the east, with their drainages flowing through long, gradual slopes down into the Weber River Valley. Other major drainages include Crandall Canyon, Chalk Creek, Echo Canyon, Hixon Canyon, Pecks Canyon, and Grass Creek. The southern exposures of these canyons are especially important winter ranges. The rest of the winter range is found in the low rolling foothills of the western and central areas of the unit. The upper limits of the winter range vary between approximately 6,800 and 7,200 feet (Giunta 1979).

Towns located in the valley along the Weber River include: Oakley, Peoa, Wanship, Hoytsville, and Coalville. Echo and Rockport Reservoirs, located on the west side of the unit on the Weber River, are both significant barriers to big game movement. Additionally, I-80 through Echo Canyon discourages big game movement and many deer deaths occur there during winter and spring.

Habitat Concerns

Mule deer habitat on the Chalk Creek Unit is divided between summer range and winter range. The summer range is mostly at higher elevations with the majority of the summer range being on private property. Due to the loss of habitat and the increasing number of elk on the unit, overuse on remaining winter range is a serious threat to the health and productivity of the winter browse species contained in

the heavily utilized ranges.

Lower elevation winter range is the major limiting factor for mule deer populations on the Chalk Creek Unit. The winter range areas are also those areas that are most at risk. Threats to mule deer habitat on the Chalk Creek Unit include the continued loss of acres and the reduction in habitat quality due to the loss of critical browse species (sagebrush, bitterbrush etc). The loss of habitat can be attributed to different factors and may be specific to specific areas. One factor is the expansion of juniper across the winter range particularly from Echo south to Oakley. Other concerns are the direct loss of crucial winter range acres due to development and urbanization. Most of the increase in home building is occurring on the foothills in what was historic deer winter range.

The increasing abundance of weedy annual grass species, and the increase of the exotic, weedy, perennial grass bulbous bluegrass are also contributing factors of sagebrush decline. These weedy species can form dense mats of cover that compete with seedling and young sagebrush plants, which limits establishment of new sagebrush plants into the population. As the sagebrush population matures, decadence increases and density decreases as old plants begin to die. Annual grass species such as cheatgrass can also increase fuel loads and increase the chance of a catastrophic fire event.

Habitat Management

Loss of critical winter ranges to development is the highest cause of loss of mule deer habitat in the Chalk Creek unit. The habitat quality of the sagebrush and other browse species on the remaining winter range is important to protect.

To address the direct loss of habitat, efforts will be made towards the protection and conservation of remaining mule deer habitat. Efforts must be made to work with counties, cities, private landowners, non-governmental organizations (NGO's), state and federal agencies to maintain and protect critical and existing winter range from future losses. Through existing partnerships and developing new conservation partners, efforts are being made to identify and prioritize critical habitat areas. Conservation easements will continue to be an important part of this effort. Other conservation efforts are ongoing throughout the unit.

To address habitat quality and degradation, habitat improvement projects have been and will continue to be planned throughout the unit. Habitat projects have been and are being done on UDWR Wildlife Management Areas, and private lands throughout the unit. The habitat projects are designed to address the specific issues within each project area. The major issues are Juniper encroachment and annual grass competition reducing the amount of browse species available to wintering wildlife. This in turn causes over-utilization of remaining browse, causing degeneration of existing plants. Recruitment of browse plants is also a concern due to annual grasses and over utilization by removing immature plants. Areas such as Crandall Canyon and the surrounding drainages are very dense in Juniper and are prime areas for Juniper removal projects, utilizing chaining, lop and scatter, bullhog and other accepted methods for thinning and removing Juniper.

There has been an active effort to address many of the limitations on this unit through the Watershed Restoration Initiative (WRI). A total of 709 acres of land have been treated within the Chalk Creek unit since the WRI was implemented in 2004; 1,168 acres are currently undergoing treatment projects. Treatments frequently overlap one another bringing the total completed treatment acres to 709 acres for this unit. Other treatments have occurred outside of the WRI through independent agencies and landowners, but the WRI comprises the majority of work done on deer winter ranges throughout the state of Utah.

The following are some of the areas that have been targeted for habitat projects within the unit over the next five years.

- Crandall Canyon winter range rehabilitation and pinyon/juniper (PJ) tree removal.
- South Fork PJ thinning and winter range enhancement.
- A particular focus of treatment area is the expanding juniper that dominates the crucial winter ranges

from Echo south to Oakley. Those areas of Phase I and II juniper will be targeted. The challenge is to find multiple cooperative landowners in a given area, where larger projects can be done.

PERMANENT RANGE TREND SUMMARIES

Purpose of Range Trend Studies
The ability to detect changes in vegetation composition (range trend) on big game winter ranges is an important part of the Division's big game management program. The health and vigor of big game populations are closely correlated to the quality and quantity of forage in key areas.

Statewide, the majority of the permanent range trend transects are located on deer and elk winter ranges. The range trend data resulting from these studies are used for habitat improvement and planning purposes.

Objective
Monitor, evaluate, and report range trend at designated key areas throughout the state, and inform Division biologists, public land managers, and private landowners of significant changes in plant community composition in these areas.

Expected Results and Benefits
Range trend transects are resurveyed every five years, and vegetation condition and trend assessments are made for key areas.

Summary and Excerpts of 2016 Range Trend Result

Unit 6 Chalk Creek

Range Trend studies have been sampled within WMU 6 on a regular basis since 1984, with studies being added or suspended as was deemed necessary. Due to changes in sampling methodologies, only data collected following the 1992 sample year is included in this summary. Monitoring studies of WRI projects began in 2004, when possible; WRI monitoring studies are established prior to treatment and sampled on a regular basis following treatment. Due to the long-term nature of the studies, many of the Range Trend and WRI studies have had some sort of disturbance or treatment prior to or since study establishment.

The condition of deer winter range within the Chalk Creek management unit has continually changed on the sites sampled since 1996. The Range Trend sites sampled within the unit are considered to be in very poor to good condition as of the most recent sample years. Crandall Canyon, North Oakley Bench, and Mahogany Hills improved from fair or fair-good to good condition. Anshutz Ranch went from good to fair condition, and Stag Canyon remained in poor condition. The Echo Canyon Rest Area, Spring Hollow Burn, and Spring Canyon studies are considered to be in very poor or very poor-poor condition generally due to the lack of preferred browse cover and sagebrush diversity. The treated study sites range from very poor-poor to poor condition; Echo Canyon Rest Area is also considered to be a Range Trend site and is therefore discussed above. Lower Crandall Canyon was not sampled prior to treatment, but is in very poor condition upon the first post-treatment sampling due to lack of preferred browse cover and sagebrush diversity. It is possible given more time and continual monitoring that these sites will continue to improve.

Desirable Components Index:

The desirable components index (DCI) for deer was created as a tool to address condition and/or value of winter ranges for mule deer. This index was designed to score mule deer winter range based upon several important vegetation components (i.e., preferred browse cover, shrub decadence, shrub young recruitment, cover of perennial grasses, cover of perennial forbs, cover of annual grasses and cover of noxious weeds). Although the index may be useful for assessing habitat for other species (i.e. sage

grouse and elk), the rating system was devised to specifically address mule deer winter range requirements.

This index is used primarily to determine if a particular site has the vegetation components necessary to be a good winter range for mule deer. It can also be used to identify areas where habitat restoration projects may be needed and assist land managers in determining possible rehabilitation options. Because it does not take into account factors such as soil stability, hydrologic function, and other environmental factors, it should not be used to assess a sites function and/or condition as typically used by the federal land management agencies. Desirable mule deer winter range provides 12-20% of preferred browse cover, 20% or less shrub decadency, and 10% or more of the shrub population is young. The herbaceous understory contains 8-15% perennial grasses cover, 5% perennial forb cover, and less than 5% annual grass cover.

Deer winter range Desirable Components Index (DCI) summary by year of Range Trend sites for WMU 6, Chalk Creek.

	1996	2001	2006	2011	2016
Good	4	1	1	3	1
Fair-Good	0	0	1	0	0
Fair	2	4	4	2	1
Poor-Fair	0	1	0	0	0
Poor	0	0	0	1	1
Very Poor-Poor	0	1	1	1	2
Very Poor	3	2	3	2	0

Number of Study Sites

More detailed information regarding Range Trend data, results, trends, tables and summaries can be found at the Utah's Big Game Range trend Studies web site at https://wildlife.utah.gov/range-trend.html

Current Population Status

Year	Buck Harvest	Post-Season F/100 D	Post-Season Buck/100 D	Post-Season Population	Population Objective	% of Objective
2014	957	68	36	15,000	10,500	143%
2015	1,038	65	42	18,300	10,500	174%
2016	1,175	60	30	15,700	10,500	150%

Duration of Plan

This unit management plan was approved by the Wildlife Board on _____ and will be in effect for five years from that date, or until amended.

DEER HERD UNIT MANAGEMENT PLAN
Deer Herd Unit # 7
(Kamas)
October 2017

BOUNDARY DESCRIPTION

Summit and Wasatch counties - Boundary begins at the junction of I-80 and SR-32 (Wanship); south on SR-32 to the Weber Canyon Road at Oakley; east on this road to Holiday Park and the Weber River Trail; east on the Weber River Trail to SR-150 near Pass Lake; south on SR-150 to the North Fork of the Provo River; south along this river to the Provo River; south along this river to SR-35; west on SR-35 to Francis and SR-32; west on SR-32 to US-40 near Jordanelle; north on US-40 to I-80; north on I-80 to SR-32 and Wanship.

LAND OWNERSHIP

RANGE AREA AND APPROXIMATE OWNERSHIP*

	Yearlong range		Summer Range		Winter Range	
Ownership	**Area (acres)**	**%**	**Area (acres)**	**%**	**Area (acres)**	**%**
U.S. Forest Service	0	--	119,932	72.5%	6,511	19%
U.S. Bureau of Land Management	0	--	91	.1%	5	.1%
Utah School and Institutional Trust Lands Administration	0	--	74	.1%	153	.5%
Native American Trust Lands	0	--	0	0%	0	0%
Private	0	--	44,824	27%	26,084	78%
U.S. Department of Defense	0	--	0	0%	0	0%
USFWS Refuge	0	--	0	0%	0	0%
National Park Service	0	--	0	0%	0	0%
Utah Division of Parks and Recreation	0	--	0	0%	148	.4%
Utah Division of Wildlife Resources	0	--	507	.3%	657	2%
TOTAL	0	--	165,428	100%	33,558	100%

UNIT MANAGEMENT GOALS

Manage for a population of healthy animals capable of providing a broad range of recreational opportunities, including hunting and viewing. Balance deer herd impacts on human needs, such as private property rights, agricultural crops and local economies. Maintain the population at a level that is within the long-term capability of the available habitat to support.

POPULATION MANAGEMENT OBJECTIVES

< Target Winter Herd Size – Maintain a target population size of 8,000 wintering deer. This population objective remains for both the short-term (5 year life of this plan) and long term, barring significant changes in range conditions.

< Herd Composition – Maintain a minimum 3-year average postseason buck to doe ratio of 18-20:100 in accordance with the statewide plan.

	Unit 7
1994-2005 Objective:	12,000
2001-2005 Objective:	8,000
2005-2017 Objective:	8,000
2018-2023 Objective:	8,000

POPULATION MANAGEMENT STRATEGIES

Monitoring

Population Size - Utilizing harvest data, postseason and spring classifications and mortality estimates, a computer model will be used to estimate winter population size. Annual mortality will be estimated based on survival of radio collared animals on a nearby representative unit.

Buck Age Structure - Estimates of the age class structure of the buck population will be determined primarily (directly) through the use of hunter harvested bucks at checking stations and field bag checks, and secondarily (indirectly) using post-season classification observations.

Harvest - The primary technique used to estimate harvest over the unit is the statewide uniform harvest surveys.

Limiting Factors (May prevent the unit from achieving management objectives)

Crop Depredation - Address depredation issues as prescribed by state law and DWR policy. Some geographic populations may be maintained below the number of animals the range could support due to conflicts with crop production and private landscapes.

Habitat – Winter range availability and condition is the major limiting factor on the Kamas unit. Excessive habitat utilization will be addressed by antlerless harvests.

Predation - Consistently high fawn/doe ratios seem to indicate that predation is not a primary limiting factor for deer on the Kamas WMU. Coyote removal through a bounty system is currently underway.

Highway Mortality – UDWR has been working closely with the Utah Department of Transportation to prevent WVC's (wildlife vehicle collisions) in this unit. Several areas have been previously identified as having high WVC's: the I-80 and SR-32 area (especially around Rockport Reservoir and the agricultural fields surrounding I-80 and the Weber River); U.S. 40 (Milepost 1-7); I-80 between U.S. 40 and SR-32 (Wanship); and Hwy. 150. This agency cooperation has resulted in the installation of 8' wildlife exclusion fences, and the construction of wildlife escape ramps in some locations. Planning is currently underway for the construction of a joint pedestrian/wildlife underpass to be located around milepost 3-4 on U.S. 40. This underpass will be in conjunction with 8' wildlife exclusion fencing. In addition, a consulting firm completed a wildlife mortality study for UDOT for I-80 from Salt Lake City to Echo Junction. This study identified additional fencing, escape ramp, and wildlife passage needs throughout the I-80 corridor.

Illegal Harvest, Crippling Loss, Disease and Parasites– Although poaching losses appear insignificant on the Kamas Unit, due primarily to a highly visible law enforcement effort, crippling losses are a concern, especially under buck-only hunting. Should illegal harvest be identified as a significant source of mortality, specific measures will be developed within the context of an Action Plan. This plan will be developed in cooperation with the Law Enforcement Section.

Disease is very difficult to evaluate, but high mortality in the spring is often associated with disease and malnutrition. The animal disease diagnostic facility associated with Utah State University acts as the laboratory to identify disease problems. Chronic Wasting disease is of further concern although it has not been detected on the unit. Surveillance will continue to be implemented by testing hunter harvested animals, as well as targeted surveillance of symptomatic animals.

Urban Deer - Continued development across this Unit has lead to an increase in nuisance deer complaints. The Urban Deer Control Rule, R657-65, will be used to help municipalities address urban deer issues. Additional hunting opportunities outside of municipal boundaries will also be used to address nuisance complaints.

HABITAT

Habitat Description

The Kamas Management Unit is located between the Uinta and Wasatch mountains in the north-central part of the state. The 1977 inventory of the Kamas unit, then known as Herd Unit 20, classified 10% of the unit as winter range (Giunta 1979). Boundary changes in 1985 reduced the total acreage and shifted a portion of the winter range north of the Weber River into the Chalk Creek management unit. There was another realignment of the herd unit boundaries again in 1996 and in 2004. Even with these changes, the ratio of winter to summer range has stayed basically the same, with about 10% of the area being classified as winter range. The limiting factor for big game in this management unit is the lack of adequate amounts of good quality winter range. With severe winters, the available range is reduced even further. An example of this problem can be illustrated by the large winter deer losses which occurred during the winter of 1992-93.

The western portion of the unit is primarily privately-owned land consisting of the Kamas valley and the "West Hills" which is situated between Kamas Valley and the Park City area, the mountainous, eastern portion of the unit is managed by the U.S. Forest Service. The Kamas Wildlife Management Area, administered by the Division of Wildlife Resources, is also located within this unit. Approximately 67% of the winter range is under private ownership with the Forest Service managing another 28% of the normal winter range. There is abundant summer range in the Uinta Mountains to the east. These mountains contain the headwaters of the Weber and Provo Rivers, which flow west through the Rhodes and Heber valleys. The south and west exposures along these rivers, in addition to land along Beaver Creek and the mountain face east and north of Kamas, provide the major deer wintering areas.

Because of the varying topography, the deer winter range is separated into several distinct areas. The upper limits vary considerably, but lower limits generally follow the canyon bottoms, roads, and the upper limits of cultivated land. Wintering areas north of the Weber River, on the Kamas face, Beaver Creek, and the Provo River, have long been recognized as crucial to the deer herd on the western edge of the Uinta Mountains.

Habitat Concerns

The summer mule deer habitat is mostly at higher elevations in the eastern part of the unit including private and National Forest Service lands. Summer range habitat concerns are the changes in the forest systems. In some areas the loss of aspen stands due to conifer encroachment is a concern. In addition, the Uinta Mountains are suffering from a high percentage of pine beetle kill. This is opening up some area to improved summer range due to increased water table and improved understory. The danger is from

catastrophic wildfire burning through the beetle killed trees.

Lower elevation winter range is the major limiting factor for mule deer populations on the Kamas Unit. The winter range areas are also those areas that are most at risk. The largest threat to mule deer habitat in the Kamas area is the direct loss of crucial winter range acres due to development and urbanization. Most of the increase in home building is occurring on the foothills in what was historic deer winter range. This development is occurring through all areas of the unit. From Oakley to Kamas on the west, including continuous development of summer homes up the canyons and scattered throughout the summer ranges. There is also significant development on the West Hills area.

In addition to the continual stresses put on the winter range by development, there is an increasing number of elk congregating on the unit. The elk are occupying the areas that were once reserved for mule deer, while the mule deer are forced to less productive areas. Overuse on remaining winter range is a serious threat to the health and productivity of the winter browse species contained in the heavily utilized ranges. In heavy winter years, these ranges are overwhelmed and have in the past been the cause of high winter mortality during deep snow years.

The increasing abundance of weedy annual grass species and the increase of the exotic, weedy, perennial grass bulbous bluegrass are also contributing factors of sagebrush decline. These weedy species can form dense mats of cover that compete with seedling and young sagebrush plants, which limits establishment of new sagebrush plants into the population. As the sagebrush population matures, decadence increases and density decreases as old plants begin to die. Annual grass species such as cheatgrass can also increase fuel loads and increase the chance of a catastrophic fire event.

There are also areas that are experiencing juniper encroachment and are in need of treatments to address this problem. Utilizing the tools available to remove juniper is important. Enhancement of existing winter range through increase and improvement of browse species, as well as increasing the diversity of the browse species is crucial to preventing future high mortality events.

Habitat Management

Loss of critical winter ranges to development is the highest cause of loss of mule deer habitat in the Kamas Unit. The habitat quality of the sagebrush and other browse species on the remaining winter range is important to protect. . Contributing factors to the loss of browse species such as the impact of the increase in weedy species (particularly annual grasses), juniper expansion, lack of browse regeneration and other variables are all of a concern in the habitat management of the Kamas Unit.

To address the direct loss of habitat, efforts will be made towards the protection and conservation of remaining mule deer habitat. Efforts must be made to work with counties, cities, private landowners, non-governmental organizations (NGO's), state and federal agencies to maintain and protect critical and existing winter range from future losses. Through existing partnerships and developing new conservation partners, efforts are being made to identify and prioritize critical habitat areas. Conservation easements will be an important part of this effort. Other conservation efforts are ongoing throughout the unit.

To address habitat quality and degradation, habitat improvement projects have been and will continue to be planned throughout the unit. Habitat projects have been and are being done on UDWR Wildlife Management Areas, and private lands throughout the unit. The habitat projects are designed to address the specific issues within each project area. The issues are juniper encroachment and annual grass competition reducing the amount of browse species available to wintering wildlife. This in turn causes over-utilization of remaining browse, causing degeneration of existing plants. Recruitment of browse plants is also a concern due to annual grasses and over utilization by removing immature plants. Areas such as Crandall Canyon and the surrounding drainages are very dense in Juniper and are prime areas for Juniper removal projects, utilizing chaining, lop and scatter, bullhog and other accepted methods for thinning and removing Juniper.

There has been an active effort to address many of the limitations on this unit through the Watershed

Restoration Initiative (WRI). A total of 1,842 acres of land have been treated within the Kamas Unit since the WRI was implemented in 2004; 625 acres are currently undergoing a treatment project, and projects are proposed for 82 acres. Treatments frequently overlap one another bringing the total completed treatment acres to 1,842 acres for this unit. Other treatments have occurred outside of the WRI through independent agencies and landowners, but the WRI comprises the majority of work done on deer winter ranges throughout the state of Utah.

Potential Habitat Projects:

- Fencing the boundary of Kamas WMA to manage prescriptive and trespass grazing.
- Scalping and or hand planting of browse species to enhance winter range
- Oak and maple rejuvenation via prescribed fire or mechanical treatment.
- Aspen regeneration on the Forest Service.
- Juniper removal on winter ranges which is mainly private lands.

PERMANENT RANGE TREND SUMMARIES

Purpose of Range Trend Studies-The ability to detect changes in vegetation composition (range trend) on big game winter ranges is an important part of the Division's big game management program. The health and vigor of big game populations are closely correlated to the quality and quantity of forage in key areas.

Statewide, the majority of the permanent range trend transects are located on deer and elk winter ranges. The range trend data resulting from these studies are used for habitat improvement and planning purposes.

Objective
Monitor, evaluate, and report range trend at designated key areas throughout the state, and inform Division biologists, public land managers, and private landowners of significant changes in plant community composition in these areas.

Expected Results and Benefits
Range trend transects are resurveyed every five years, and vegetation condition and trend assessments are made for key areas.

Summary and Excerpts of 2016 Range Trend Result

Unit 7 Kamas

Range Trend studies have been sampled within WMU 7 on a regular basis since 1984, with studies being added or suspended as was deemed necessary. Due to changes in sampling methodologies, only data collected following the 1992 sample year is included in this summary. Monitoring studies of WRI projects began in 2004, when possible; WRI monitoring studies are established prior to treatment and sampled on a regular basis following treatment. Due to the long-term nature of the studies, many of the Range Trend and WRI studies have had some sort of disturbance or treatment prior to or since study establishment.

Deer Winter Range Condition Assessment

The condition of deer winter range within the Kamas management unit has changed on sites sampled since 1996. The Range Trend sites that were sampled vary in condition from very poor to good as of the 2016 sample year. No sites were in poor or fair condition. Pinyon Canyon improved from fair-good to good condition, while Above Samak and Cedar Hollow deteriorated from good to fair-good condition. Above Woodland went from fair to very poor condition and Elder Hollow went from poor to very poor condition, generally due to increases in annual grasses and noxious weeds as well as reductions in

preferred browse cover. Foothill Drive remained very poor due to annual grasses and low preferred browse cover. The only disturbed site in this unit is the Above Samak study, which is also considered to be a Range Trend site and is therefore discussed above.

Desirable Components Index:

The desirable components index (DCI) for deer was created as a tool to address condition and/or value of winter ranges for mule deer. This index was designed to score mule deer winter range based upon several important vegetation components (i.e., preferred browse cover, shrub decadence, shrub young recruitment, cover of perennial grasses, cover of perennial forbs, cover of annual grasses and cover of noxious weeds). Although the index may be useful for assessing habitat for other species (i.e. sage grouse and elk), the rating system was devised to specifically address mule deer winter range requirements.

This index is used primarily to determine if a particular site has the vegetation components necessary to be a good winter range for mule deer. It can also be used to identify areas where habitat restoration projects may be needed and assist land managers in determining possible rehabilitation options. Because it does not take into account factors such as soil stability, hydrologic function, and other environmental factors, it should not be used to assess a sites function and/or condition as typically used by the Federal land management agencies. Desirable mule deer winter range provides 12-20% of preferred browse cover, 20% or less shrub decadency, and 10% or more of the shrub population is young. The herbaceous understory contains 8-15% perennial grasses cover, 5% perennial forb cover, and less than 5% annual grass cover.

Deer winter range Desirable Components Index (DCI) summary by year of Range Trend sites for WMU 7, Kamas.

	1996	2001	2006	2011	2016
Good	1	1	0	2	1
Fair-Good	1	1	0	2	2
Fair	2	3	4	1	0
Poor	1	1	0	1	0
Very Poor	1	1	3	1	3

Number of Study Sites

More detailed information regarding Range Trend data, results, trends, tables and summaries can be found at the Utah's Big Game Range trend Studies web site at https://wildlife.utah.gov/range-trend.html

Current Population Status

Year	Buck Harvest	Post-Season F/100 D	Post-Season Buck/100 D	Post-Season Population	Population Objective	% of Objective
2013	612	64	23	7,000	8,000	88%
2014	657	67	22	7,700	8,000	96%
2015	704	64	28	9,200	8,000	115%

2016	766	60	31	10,400	8,000	130%

Duration of Plan

This unit management plan was approved by the Wildlife Board on _____ and will be in effect for five years from that date, or until amended.

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
MICHAL D. FOWLKS
Interim Division Director

MEMORANDUM

Date: October 17, 2017

To: Wildlife Board and Regional Advisory Council Members

From: David Smedley, District Biologist

Subject: Mineral Mountains Bighorn Sheep Unit Plan

We are recommending a bighorn sheep unit management plan for the Mineral Mountains. In the plan we:

1) define a unit boundary.
2) address issues and concerns.
3) outline unit goals, objectives, and strategies for bighorn sheep management on the Mineral Mountains.

See attachment for details.

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BIGHORN SHEEP UNIT MANAGEMENT PLAN
MINERAL MOUNTAINS
October 2017

BOUNDARY DESCRIPTION

Beaver and Millard counties: Boundary begins at Black Rock Road and I-15 near Cove Fort; west on Black Rock Road to SR-257; south on SR-257 to SR-21; south and east SR-21 to I-15; north on I-15 to Black Rock Road near Cove Fort.

LAND OWNERSHIP

Table 1. Range area and approximate ownership of Mineral Mountains bighorn sheep management unit and modeled bighorn sheep habitat.

Ownership	MANAGEMENT UNIT		MODELED SHEEP HABITAT	
	Area (acres)	%	Area (acres)	%
Bureau of Land Management	233,656	68%	91,733	87%
Private	84,723	25%	4,653	4%
Utah State Institutional Trust Lands	23,885	7%	9,880	9%
Tribal	262	<1%	0	0%
Utah State Parks	208	<1%	1	<1%
Utah Division of Wildlife Resources	40	<1%	40	<1%
Utah Department of Transportation	1	<1%	0	0%
Totals	**342,774**	**100%**	**106,307**	**100%**

UNIT MANAGEMENT GOALS

The Mineral Mountains unit is located west of Beaver and east of Milford (Figure 1). It is proposed to transplant desert bighorn sheep into the unit in an effort to establish new populations in accordance with Utah Code 23-14-21 and promote wildlife diversity in the area for hunting and viewing. This plan will then guide future management decisions consistent with the Utah Statewide Bighorn Sheep Management Plan. Specific goals are to:

1) Manage for a healthy population of desert bighorn sheep capable of providing a broad range of recreational opportunities, including hunting and viewing.
2) Balance bighorn sheep impacts with other uses such as authorized cattle grazing and local economies.
3) Maintain a population that is sustainable within the available habitat in the unit boundary.

CURRENT STATUS

Bighorn sheep do not currently exist on the Mineral Mountains.

ISSUES AND CONCERNS

Potential Habitat: We modeled potential bighorn sheep habitat on the Mineral Mountains using methodology outlined by O'Brien et al. (2014). Bighorn sheep select habitat based on the proximity of steep-sloped escape terrain, forage availability, ruggedness, and horizontal visibility (Bleich et al. 1997, Valdez and Krausman 1999, Sappington et al. 2007). Bighorn sheep habitat is located throughout the mountain range (Figure 1). Additional habitat exists in areas that have become dominated by old growth pinyon and juniper forests as well as other conifer stands that have reduced value to bighorn. Aggressive habitat restoration efforts to return these areas into productive early successional stages will further expand bighorn sheep habitat throughout the Mineral Mountains.

Livestock Competition: Interactions of bighorn sheep with domestic cattle are anticipated seasonally. Dietary overlap between cattle and bighorns has not surfaced as a concern with other bighorn populations in the state and is not expected for the Mineral Mountain herd. Desert bighorn annual use of forage classes, when compared to cattle, differ significantly (Dodd and Brady 1988). Likewise, bighorn sheep generally avoid areas where cattle are present (Bissonette and Steinkamp 1996), and also select areas with a much higher degree of slope (Ganskopp and Vavra 1987), which also minimizes competition for water. Desert bighorn sheep have the ability to utilize metabolic water formed by oxidative metabolism, preformed water found in food, and surface water, including dew. The amount of surface water required by desert bighorns is dependent on many factors, including body size, activity, forage moisture content, temperature, and humidity (Monson and Sumner 1980). In hot, dry periods, bighorns will water daily if possible but have remained independent of surface water for periods of 5-8 days (Blong and Pollard 1968, Turner and Boyd 1970, Turner 1973, Welles and Welles 1961, 1966). Across all seasons, desert bighorns drink on average every 10-14 days (Welles and Welles 1961). It has been reported, in extreme cases, that desert bighorns did not drink for a period of several months (Monson 1958, Mendoza 1976). Koplin (1960) found that a captive herd of desert bighorn sheep that were fed a dry ration and provided unlimited water drank an average of 4.9 liters (1.3 gal) per day.

Disease: Disease, especially bacterial pneumonia, has been responsible for numerous declines in bighorn populations throughout North America (Cassirer and Sinclair 2007). Pneumonia outbreaks typically affect all age/sex cohorts and are usually followed by several years of annual pneumonia outbreaks in lambs that dramatically reduce population growth (Spraker et al. 1984, Ryder et al. 1992, George et al. 2008). These events are attributed to the transfer of pathogens from domestic sheep (*Ovis aries*) or goats (*Capra aegagrus hircus*) to wild sheep through social contact (Singer et al. 2000, Monello et al. 2001, Cassirer and Sinclair 2007). Disease-induced mortality rates in bighorn sheep vary substantially by population due to multiple processes including

contact rates, social substructuring, pathogen virulence, and individual susceptibility (Manlove et al. 2014, 2016). Therefore, spatial separation from domestic sheep and goats is the most important factor in maintaining overall herd health. It is not the intent of this plan or the DWR to force domestic sheep operators off of their ranges or out of business.

Predation: Cougar predation may limit bighorn sheep in locations where predator populations are largely supported by sympatric prey populations (Hayes et al. 2000, Schaefer et al. 2000, Ernest et al. 2002), which, in this case, includes mule deer, domestic cattle, and elk. It has been hypothesized that declines in sympatric ungulate populations can increase predation on bighorn sheep as cougars switch to bighorns as an alternate prey source (Kamler et al. 2002, Rominger et al. 2004). It is anticipated that cougars will be the main predator of bighorns on the Mineral Mountains. Predator management is coordinated with USDA Wildlife Services. If predation becomes a limiting factor, predator control work is administered within the guidelines of the DWR Predator Management Policy. Predator reduction work already occurs on the Mineral Mountains in conjunction with livestock losses, and therefore any additional work that may be done would be mutually beneficial to both livestock and other big game species.

POPULATION MANAGEMENT

Population Management Objectives:

1) Achieve and maintain a population objective of 175 total desert bighorn sheep.

Population Management Strategies:

Transplant Plan: Transplant(s) of wild bighorn sheep will be used to establish a viable herd. Initial transplant should occur with a minimum of 40 bighorns. The source population will likely be from the Zion unit. Newly transplanted bighorns will be monitored for general movements and annual survival. Interested parties have been notified and given opportunity for discussion. This includes the Beaver County Commission, Millard County Commission, BLM, and grazing permittees. As the population reaches or approaches the population objective, individuals may be transplanted out of the unit to establish or augment other populations elsewhere.

Monitoring: Monitoring of bighorn sheep will be conducted every 2-3 years by aerial survey to determine lamb recruitment, population status, ram-to-ewe ratios, range distribution, and ages and quantity of rams. This population will likely require 8 hours to conduct a complete trend count and survey adjacent areas to evaluate wild sheep dispersal. Additional ground classification may be conducted as conditions permit. GPS collars with mortality signals will be used to document cause-specific mortality and identify annual survival estimates. Space use will be monitored to assess potential overlap and competition with cattle. Additional GPS collars will be added to the population as needed.

Predator Management: Predator management will be coordinated with USDA Wildlife Services prior to bighorn release. If predation becomes a limiting factor on bighorns,

predator control work will be administered within the guidelines of the DWR Predator Management Policy.

DISEASE MANAGEMENT

Disease Management Objectives:

1) Maintain a healthy population of desert bighorn sheep on the Mineral Mountains range.
2) Maintain spatial separation from domestic sheep and goats.

Disease Management Strategies:

Disease Monitoring: Source herds used for establishing this population will be tested for pneumonia related pathogens prior to release to ensure healthy source stock. Periodic herd health assessments may be conducted as part of statewide wildlife health monitoring program, and bighorn mortalities will be opportunistically sampled and tested.

Spatial Separation: Active domestic sheep allotments and hobby farms with domestic sheep will be evaluated for potential overlap with bighorn habitat prior to a bighorn transplant. The DWR will delineate areas where there is high risk for domestic sheep and goats to come in contact with wild sheep or where wild sheep may stray and come in contact with domestics. These areas will be considered areas of concern. Lethal or non-lethal removal of bighorns may be warranted in these areas to prevent comingling. The need to test wandering sheep from this unit will be evaluated on a case by case basis. The BLM and DWR will explore the possibility of using fencing to prevent comingling with trailing domestic sheep.

HABITAT MANAGEMENT

Habitat Management Objectives:

1) Maintain or improve sufficient bighorn sheep habitat to achieve population objective.
2) Support and encourage regulated livestock grazing and maintain/enhance forage production through range improvement projects on the Mineral Mountains.
3) Improve habitat and water availability where possible.

Habitat Management Strategies:

Monitoring: The DWR will assist land management agencies in monitoring bighorn habitat to detect changes in habitat quantity or quality.

Habitat Improvement: Vegetative treatment projects to improve bighorn habitat lost to natural succession or human impacts will be sought out and initiated. The DWR will cooperate with the BLM to utilize seeding, controlled burns, and/or mechanical treatments for conifer removal in order to increase and improve bighorn habitat across the unit. Habitat restoration projects beneficial to both bighorn sheep and sympatric cattle will be given priority.

Areas identified as priorities for habitat improvement are as follows:

- seeding of Porcupine area
- seeding of Honeyboy area
- pinyon/juniper removal in the Granite Peak area

Water Improvement: The DWR will work with the BLM and private stakeholders to locate and cooperatively modify or improve existing water sources or install new water developments across bighorn habitat.

Areas identified as priorities for water improvement are as follows:

- Hodgsen well and troughs
- Shagwell solar well
- Bailey Springs pipeline extension
- Cherry Creek pipeline extension
- Bailey Mountain guzzler replacement
- Shag Spring
- Rock Corral

RECREATION MANAGEMENT

Recreation Management Objectives:

1) Provide high quality hunting opportunities when the Mineral Mountains population has established.
2) Increase public awareness and expand viewing opportunities of bighorn sheep.

Recreation Management Strategies:

Hunting: Hunting and permit allocation recommendations will be made in accordance with the Utah Bighorn Sheep Statewide Management Plan. A bighorn hunt will be opened on this unit when there is a harvestable and sustainable age class of rams at least 6 years of age or older. Hunting opportunities will be managed in order to maintain high hunter success rates and satisfaction as outlined in the Utah Bighorn Sheep Statewide Management Plan. Ewe hunts may be utilized as tool for maintaining population objective.

Non-Consumptive Uses: The DWR will look for opportunities to increase public awareness and expand viewing opportunities of bighorn sheep through viewing events and public outreach.

PUBLIC INVOLVEMENT

Public Involvement Objective:

1) Provide opportunities for local stakeholders and cooperating agencies to be involved in the management process.

Public Involvement Strategies:

Plan Revision: If the population objective or other key components of this plan are to be revised in the future, affected cooperating agencies, local stakeholders, and grazing permittees will be invited to take part in the decision-making process.

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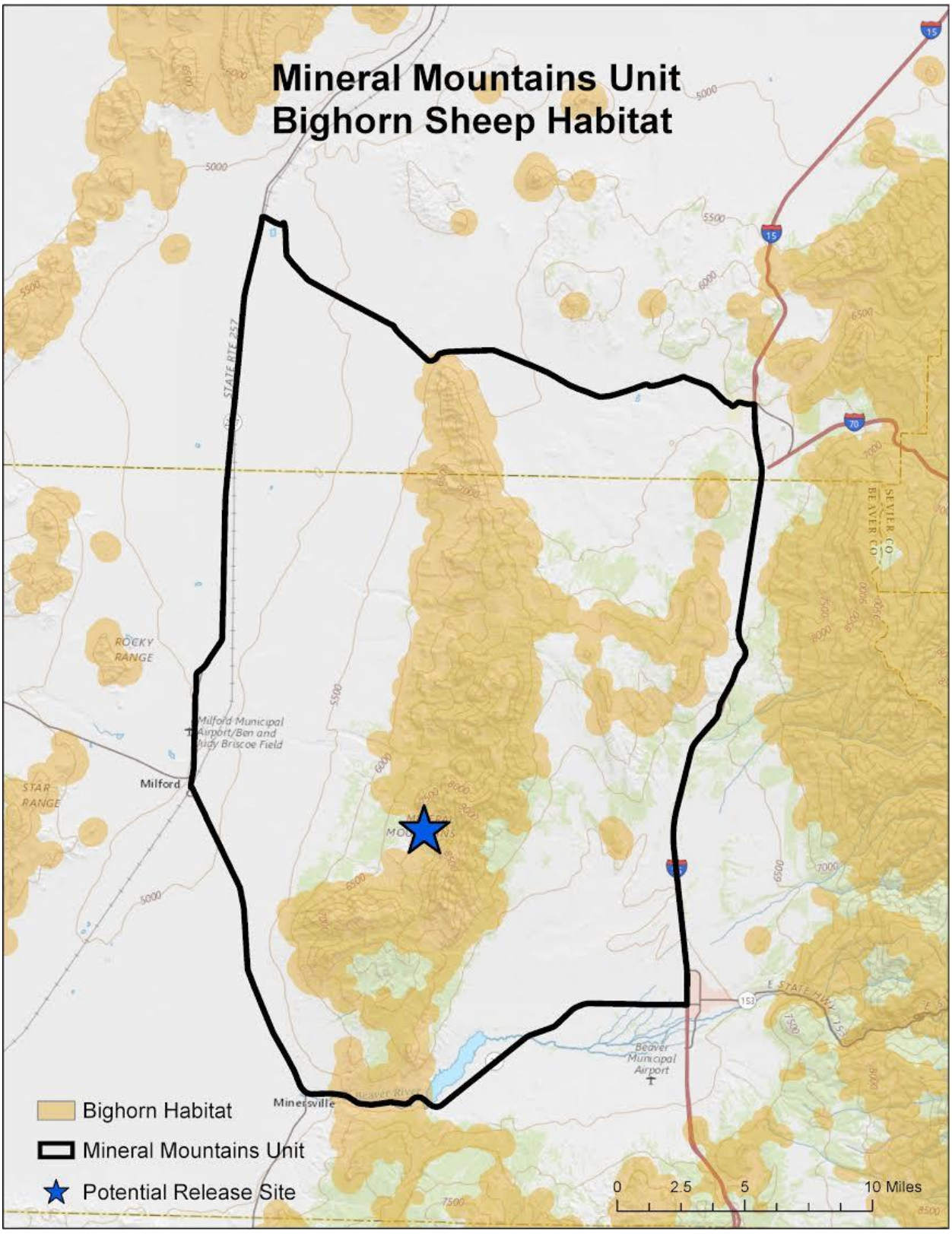

Figure 1. Mineral Mountains bighorn sheep habitat and management unit boundary, Millard and Beaver Counties, UT, USA.

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
MICHAL D. FOWLKS
Division Director

MEMORANDUM

Date: October 4, 2017

To: Wildlife Board and Regional Advisory Council Members

From: Mike Wardle, Private Lands – Public Wildlife Coordinator

Subject: 2018 Buck/Bull/Turkey CWMU (Cooperative Wildlife Management Unit) and Buck/Bull LOA (Landowner Association) recommendations.

The following is a summary of the 2018 Bucks and Bulls CWMU and Landowner Association recommendations. There are three types of applications received for the CWMUs: New, Renewal, and Change applications.

- There is 1 new CWMU application:
  - Rosette CWMU, Northern Region
- 85 CWMUs submitted applications for renewal for 2018.
- One CWMU recommended for denial. They did not meet the minimum acreage required in the CWMU rule during the previous three year COR as requested by the Board. (Jump Creek, Southeastern region)
- One CWMU applied for changes to permit numbers, splits, or season dates that require RAC and Board approval.
- 7 CWMUs did not re-apply
- There will be 125 CWMUs for the 2018 hunting season, based on DWR recommendations

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The total recommended CWMU permits for 2018 are:

	PRIVATE PERMITS	PUBLIC PERMITS
BUCK DEER	1,933	252
MANAGEMENT BUCK DEER	4	1
BULL ELK	914	133
BUCK PRONGHORN	47	38
BULL MOOSE	90	61
TURKEY	20	20
TOTALS	**3,008**	**505**

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

2018 LANDOWNER ASSOCIATION RECOMMENDATIONS

- Two Landowner Association were approved in 2017 for three years and require no RAC or Wildlife Board action
- No new landowner associations.
- Four landowner Associations are requesting a change in permit numbers
- A total of 117 buck deer permits, 4 management buck deer, 80 elk, and 9 pronghorn vouchers were **requested** for Landowner Associations for the 2018 season.
- A total of 109 buck deer permits, 1 management buck deer, 71 elk, and 8 pronghorn vouchers are **recommended** for Landowner Associations for the 2018 season.

CWMU Recommendations

DWR_Region	CWMU_Name	Species	Sex	Rcmnd_Private	Rcmnd_Public	Rcmnd_HuntDate	Ratio	Acres_Private	Acres_Public	County	Comments
CRO	Bear Mountain	DEER	Buck	9	1	9/11-11/10/2018	90:10	8900	0	Sanpete	Renewal
CRO	Bear Mountain	ELK	Bull	6	1	9/01-10/31/2018	85:15	8900	0	Sanpete	Renewal
CRO	Coyote Little Pole	DEER	Buck	18	2	9/11-11/10/2018	90:10	13211	0	Wasatch	Renewal
CRO	Coyote Little Pole	ELK	Bull	8	2	9/01-10/31/2018	80:20	13211	0	Wasatch	Renewal
CRO	Coyote Little Pole	MOOSE	Bull	1	1	9/01-10/31/2018	60:40	13211	0	Wasatch	Renewal
CRO	Double R Ranch	DEER	Buck	27	3	9/11-11/10/2018	90:10	12242	0	Wasatch	Renewal
CRO	Double R Ranch	ELK	Bull	9	1	9/01-10/31/2018	90:10	12242	0	Wasatch	Renewal
CRO	Heaston East	DEER	Buck	22	2	9/11-11/10/2018	90:10	63810	0	Salt Lake	Renewal
CRO	Heaston East	ELK	Bull	20	3	9/01-11/15/2018	85:15	63810	0	Salt Lake	Renewal
CRO	Skull Valley South	DEER	Buck	9	1	9/11-11/10/2018	90:10	31316	0	Tooele	Renewal
CRO	Skull Valley South	PRONGHORN	Buck	2	1	9/01-10/31/2018	60:40	31316	0	Tooele	Renewal
CRO	Three C	DEER	Buck	18	2	9/11-11/10/2018	90:10	14676	0	Wasatch	Renewal
CRO	Three C	ELK	Bull	8	2	9/01-10/31/2018	80:20	14676	0	Wasatch	Renewal
CRO	Three C	MOOSE	Bull	1	1	9/01-10/31/2018	60:40	14676	0	Wasatch	Renewal
CRO	Wallsburg	DEER	Buck	9	1	9/11-11/10/2018	90:10	9379	0	Wasatch	Renewal
CRO	Wallsburg	ELK	Bull	6	1	9/01-10/31/2018	85:15	9379	0	Wasatch	Renewal
CRO	Wallsburg	MOOSE	Bull	0	1	9/01-10/31/2018	60:40	9379	0	Wasatch	Renewal
CRO	Westlake	PRONGHORN	Buck	2	1	9/01-10/31/2018	60:40	23637	0	Utah	Renewal
NERO	Antelope Creek	DEER	Buck	2	1	9/11-11/10/2018	90:10	24362	0	Duchesne	Renewal
NERO	Antelope Creek	PRONGHORN	Buck	5	3	9/01-10/31/2018	60:40	24362	0	Duchesne	Renewal
NERO	Avintaquin Canyon	DEER	Buck	9	1	9/11-11/10/2018	90:10	8478	0	Duchesne	Renewal
NERO	Buckhorn Ranch	DEER	Buck	6	1	9/11-11/10/2018	90:10	6475	0	Duchesne/Wasatch	Renewal
NERO	Little Red Creek	DEER	Buck	18	2	9/11-11/10/2018	90:10	18100	0	Wasatch	Renewal
NERO	Little Red Creek	ELK	Bull	12	2	9/01-10/31/2018	85:15	18100	0	Wasatch	Renewal
NERO	Moon Ranch	DEER	Buck	9	1	9/11-11/10/2018	90:10	13000	0	Duchesne	Renewal
NERO	Moon Ranch	ELK	Bull	9	2	9/01-10/31/2018	85:15	13000	0	Duchesne	Renewal
NERO	Sand Creek	DEER	Buck	9	1	9/11-11/10/2018	90:10	10200	0	Duchesne	Renewal
NERO	Sand Creek	ELK	Bull	8	1	9/01-10/31/2018	85:15	10200	0	Duchesne	Renewal
NRO	Bally Watts	DEER	Buck	18	2	9/11-11/10/2018	90:10	10305	0	Morgan, Weber	Renewal
NRO	Bally Watts	MOOSE	Bull	1	1	9/01-10/31/2018	60:40	10305	0	Morgan, Weber	Renewal
NRO	Bear Springs	DEER	Buck	9	1	9/11-11/10/2018	90:10	14125	0	Morgan/Weber	Renewal
NRO	Bear Springs	ELK	Bull	9	1	9/01-10/31/2018	90:10	14125	0	Morgan/Weber	Renewal
NRO	Bear Springs	MOOSE	Bull	1	1	9/01-10/31/2018	60:40	14125	0	Morgan/Weber	Renewal
NRO	Beaver Hollow	MOOSE	Bull	1	2	9/01-10/31/2018	60:40	14000	0	Morgan/Rich	Renewal
NRO	Blind Spring	DEER	Buck	9	1	9/11-11/10/2018	90:10	5169	0	Box Elder	Renewal
NRO	Blue Spring Hills	DEER	Buck	9	1	9/01-10/31/2018	90:10	8808	0	Box Elder	Renewal
NRO	Bluebell	DEER	Buck	9	1	9/11-11/10/2018	90:10	7480	0	Cache/Weber	Renewal
NRO	Chimney Rock	DEER	Buck	18	2	9/11-11/10/2018	90:10	14445	0	Summit/Morgan	Renewal
NRO	Chimney Rock	ELK	Bull	18	2	9/01-11/30/2018	90:10	14445	0	Summit/Morgan	Renewal
NRO	Chimney Rock	MOOSE	Bull	1	1	9/01-10/31/2018	60:40	14445	0	Summit/Morgan	Renewal
NRO	Clear Valley Ranch	DEER	Buck	9	1	9/11-11/10/2018	90:10	5511	0	Box Elder	Renewal
NRO	Coldwater Ranch	DEER	Buck	18	2	9/01-10/31/2018	90:10	33395	0	Cache	Renewal
NRO	Coldwater Ranch	ELK	Bull	18	2	9/01-10/31/2018	90:10	33395	0	Cache	Renewal
NRO	Deseret	DEER	Buck	80	15	9/11-11/10/2018	90:10	225031	15359	Morgan/Rich/Weber	Renewal
NRO	Deseret	ELK	Bull	93	17	9/01-11/22/2018	90:10	225031	15359	Morgan/Rich/Weber	Renewal

CWMU Recommendations

DWR_Region	CWMU_Name	Species	Sex	Rcmnd_Private	Rcmnd_Public	Rcmnd_HuntDate	Ratio	Acres_Private	Acres_Public	County	Comments
NRO	Deseret	MOOSE	Bull	2	2	9/01-10/31/2018	60:40	225031	15359	Morgan/Rich/Weber	Renewal
NRO	Deseret	PRONGHORN	Buck	38	29	9/01-10/31/2018	60:40	225031	15359	Morgan/Rich/Weber	Renewal
NRO	Dilly Ranch	DEER	Buck	9	1	9/11-11/10/2018	90:10	7981	0	Box Elder	Renewal
NRO	Double Cone	DEER	Buck	6	1	9/11-11/10/2018	90:10	5329	4365	Box Elder	Renewal
NRO	Double Cone	ELK	Bull	6	1	9/01-10/31/2018	85:15	5329	4365	Box Elder	Renewal
NRO	Dove Creek	DEER	Buck	18	2	9/11-11/10/2018	90:10	18770	570	Box Elder	Renewal
NRO	Durst Mountain	DEER	Buck	18	2	9/11-11/10/2018	90:10	26358	0	Morgan	Renewal
NRO	Durst Mountain	ELK	Bull	27	3	9/01-10/31/2018	90:10	26358	0	Morgan	Renewal
NRO	Durst Mountain	MOOSE	Bull	1	1	9/01-10/31/2018	60:40	26358	0	Morgan	Renewal
NRO	East Fork Chalk Creek	DEER	Buck	32	4	9/11-11/10/2018	90:10	16002	0	Summit	Renewal
NRO	East Fork Chalk Creek	ELK	Bull	25	3	9/01-11/20/2018	90:10	16002	0	Summit	Renewal
NRO	East Fork Chalk Creek	MOOSE	Bull	3	2	9/01-10/31/2018	60:40	16002	0	Summit	Renewal
NRO	Engineer Springs	DEER	Buck	9	1	9/11-11/10/2018	90:10	21943	0	Box Elder	Renewal
NRO	Ensign Ranches	DEER	Buck	36	4	9/11-11/10/2018	90:10	83363	0	Morgan/Rich/Summit	Renewal
NRO	Ensign Ranches	ELK	Bull	17	3	9/01-11/20/2018	85:15	83363	0	Morgan/Rich/Summit	Renewal
NRO	Ensign Ranches	MOOSE	Bull	2	2	9/01-10/31/2018	60:40	83363	0	Morgan/Rich/Summit	Renewal
NRO	Ensign Ranches	PRONGHORN	Buck	3	2	9/01-10/31/2018	60:40	83363	0	Morgan/Rich/Summit	Renewal
NRO	Folley Ridge	DEER	Buck	27	3	9/11-11/10/2018	90:10	18260	0	Morgan	Renewal
NRO	Folley Ridge	ELK	Bull	18	2	9/01-10/31/2018	90:10	18260	0	Morgan	Renewal
NRO	Folley Ridge	MOOSE	Bull	1	1	9/01-10/31/2018	60:40	18260	0	Morgan	Renewal
NRO	Folley Ridge	TURKEY	Bearded	5	5	2nd Sat in Apr-May 31st	50:50	18260	0	Morgan	Renewal
NRO	Golden Spike	DEER	Buck	9	1	9/01-10/31/2018	90:10	19184	0	Box Elder	Renewal
NRO	Green Canyon	DEER	Buck	9	1	9/11-11/10/2018	90:10	5920	130	Cache	Renewal
NRO	Guildersleeve	DEER	Buck	18	2	9/11-11/10/2018	90:10	8000	0	Morgan	Renewal
NRO	Guildersleeve	ELK	Bull	9	1	9/01-10/31/2018	90:10	8000	0	Morgan	Renewal
NRO	Indian Creek	DEER	Buck	18	2	9/11-11/10/2018	90:10	7340	30	Box Elder	Renewal
NRO	Lone Tree Taylor Hollow	DEER	Buck	36	4	9/11-11/10/2018	90:10	14100	0	Morgan/Summit	Renewal
NRO	Lone Tree Taylor Hollow	ELK	Bull	27	3	9/01-10/31/2018	90:10	14100	0	Morgan/Summit	Renewal
NRO	Lone Tree Taylor Hollow	MOOSE	Bull	1	1	9/01-10/31/2018	60:40	14100	0	Morgan/Summit	Renewal
NRO	Meadow Creek	ELK	Bull	6	3	9/01-10/31/2018	80:20	9200	10400	Box Elder	Renewal
NRO	Middle Ridge	DEER	Buck	12	3	9/11-11/10/2018	90:10	4971	1274	Rich	Renewal
NRO	Middle Ridge	PRONGHORN	Buck	2	2	9/01-10/31/2018	60:40	4971	1274	Rich	Renewal
NRO	Mountain Meadow	DEER	Buck	18	2	9/11-11/10/2018	90:10	7947	0	Box Elder	Renewal
NRO	North Peaks	DEER	Buck	18	2	9/11-11/10/2018	90:10	22480	2040	Box Elder	Renewal
NRO	North Peaks	ELK	Bull	4	1	9/01-10/31/2018	90:10	22480	2040	Box Elder	Renewal
NRO	North Promontory	DEER	Buck	18	2	9/11-11/10/2018	90:10	20790	0	Box Elder	Renewal
NRO	Nucor West	DEER	Buck	9	1	9/11-11/10/2018	90:10	6960	0	Box Elder	Renewal
NRO	Park Valley	PRONGHORN	Buck	2	1	9/01-10/31/2018	60:40	9672	0	Box Elder	Renewal
NRO	Park Valley Hereford	DEER	Buck	40	11	9/01-10/31/2018	90:10	18942	3380	Box Elder	Renewal
NRO	Pisgah Mountain	DEER	Buck	18	2	9/11-11/10/2018	90:10	5754	0	Box Elder/Cache	Renewal
NRO	Plymouth Peak	DEER	Buck	9	1	9/11-11/10/2018	90:10	5179	0	Box Elder	Renewal
NRO	Pocatello Valley	DEER	Buck	9	1	9/01-10/31/2018	90:10	6250	0	Box Elder	Renewal
NRO	Powder Mountain	DEER	Buck	9	1	9/11-11/10/2018	90:10	11687	0	Weber, Cache	Renewal
NRO	Powder Mountain	ELK	Bull	3	1	9/01-10/31/2018	75:25	11687	0	Weber, Cache	Renewal
NRO	Powder Mountain	MOOSE	Bull	1	1	9/01-10/31/2018	60:40	11687	0	Weber, Cache	Renewal

CWMU Recommendations

DWR_Region	CWMU_Name	Species	Sex	Rcmnd_Private	Rcmnd_Public	Rcmnd_HuntDate	Ratio	Acres_Private	Acres_Public	County	Comments
NRO	Promontory Point	DEER	Buck	9	1	9/11-11/10/2018	90:10	19498	0	Box Elder	Renewal
NRO	RLF Deep Creek	PRONGHORN	Buck	3	2	9/01-10/31/2018	60:40	11129	0	Box Elder	Renewal
NRO	Rosette	DEER	Buck	2	1	9/01-10/31/2018	90:10	5305	0	Box Elder	NEW
NRO	Sharp Mountain	DEER	Buck	18	2	9/01-10/31/2018	90:10	10800	0	Cache/Weber	Renewal
NRO	Sharp Mountain	MOOSE	Bull	1	1	9/01-10/31/2018	60:40	10800	0	Cache/Weber	Renewal
NRO	SJ Ranch	ELK	Bull	7	1	9/01-10/31/2018	90:10	6073	0	Cache	Renewal
NRO	SJ Ranch	MOOSE	Bull	1	1	9/01-10/31/2018	60:40	6073	0	Cache	Renewal
NRO	SJ Ranch	PRONGHORN	Buck	3	2	9/01-10/31/2018	60:40	6073	0	Cache	Renewal
NRO	Skull Crack	DEER	Buck	9	1	9/11-11/10/2018	90:10	27700	0	Morgan/Weber	Renewal
NRO	Skull Crack	ELK	Bull	9	1	9/01-10/31/2018	90:10	27700	0	Morgan/Weber	Renewal
NRO	Skull Crack	MOOSE	Bull	3	2	9/01-10/31/2018	60:40	27700	0	Morgan/Weber	Renewal
NRO	South Canyon	DEER	Buck	9	1	9/11-11/10/2018	90:10	17000	480	Box Elder/Cache	Renewal
NRO	South Canyon	ELK	Bull	9	1	9/01-10/31/2018	90:10	17000	480	Box Elder/Cache	Renewal
NRO	South Canyon	MOOSE	Bull	1	1	9/01-10/31/2018	60:40	17000	480	Box Elder/Cache	Renewal
NRO	Spring Creek Acres	DEER	Buck	8	1	9/11-11/10/2018	90:10	6600	0	Cache	Renewal
NRO	Thatcher Mountain	DEER	Buck	9	1	9/01-10/31/2018	90:10	5411	0	Box Elder	Renewal
NRO	The Rose of Snowville	PRONGHORN	Buck	3	2	9/01-10/31/2018	60:40	14140	0	Box Elder	Renewal
NRO	Two Bear	DEER	Buck	18	2	9/01-10/31/2018	90:10	35351	0	Summit	Renewal
NRO	Two Bear	ELK	Bull	27	3	9/01-10/31/2018	90:10	35351	0	Summit	Renewal
NRO	Two Bear	MOOSE	Bull	2	2	9/01-10/31/2018	60:40	35351	0	Summit	Renewal
NRO	Washakie	DEER	Buck	9	1	9/11-11/10/2018	90:10	14516	0	Box Elder	Renewal
NRO	Weber Florence Creek	DEER	Buck	72	8	9/01-10/31/2018	90:10	36915	0	Summit	Renewal
NRO	Weber Florence Creek	ELK	Bull	63	7	9/01-11/20/2018	90:10	36915	0	Summit	Renewal
NRO	Weber Florence Creek	MOOSE	Bull	4	3	9/01-10/31/2018	60:40	36915	0	Summit	Renewal
NRO	West Hills	DEER	Buck	20	3	9/11-11/10/2018	90:10	20160	640	Box Elder	Renewal
SERO	Black Hawk	Elk	Bull	5	1	9/01-11/30/2018	80:20	11963	0	Carbon	Permit Change
SERO	Castle Valley Outdoors	DEER	Buck	7	1	9/11-11/10/2018	90:10	11897	80	Emery	Renewal
SERO	Conover-Jensen	DEER	Buck	27	3	9/01-10/31/2018	90:10	10805	0	Carbon	Renewal
SERO	Conover-Jensen	ELK	Bull	6	1	9/01-10/31/2018	80:20	10805	0	Carbon	Renewal
SERO	Deer Haven	DEER	Buck	16	2	9/01-10/31/2018	90:10	15194	0	San Juan	Renewal
SERO	Hiawatha	DEER	Buck	9	1	9/11-11/10/2018	90:10	16129	0	Carbon/Emery	Renewal
SERO	Hiawatha	ELK	Bull	7	1	9/01-11/30/2018	85:15	16129	0	Carbon/Emery	Renewal
SERO	Indian Head	DEER	Buck	18	2	9/11-11/10/2018	90:10	18900	1040	Utah, Carbon, Duchesne	Renewal
SERO	Indian Head	ELK	Bull	12	2	9/01-10/31/2018	85:15	18900	1040	Utah, Carbon, Duchesne	Renewal
SERO	Jump Creek	ELK	Bull	0	0		80:20	7210	0	Carbon	DENY
SERO	Patmos Ridge	DEER	Buck	9	1	9/11-11/10/2018	90:10	17525	0	Carbon	Renewal
SERO	Patmos Ridge	ELK	Bull	5	1	9/01-10/31/2018	80:20	17525	0	Carbon	Renewal
SERO	Preston Nutter Ranch	DEER	Buck	9	1	9/01-10/31/2018	90:10	26851	0	Carbon	Renewal
SERO	Preston Nutter Ranch	ELK	Bull	18	2	9/01-10/31/2018	90:10	26851	0	Carbon	Renewal
SERO	Roan Cliffs	DEER	Buck	36	4	9/01-10/31/2018	90:10	22807	760	Carbon	Renewal
SERO	Roan Cliffs	ELK	Bull	18	2	9/01-10/31/2018	90:10	22807	760	Carbon	Renewal
SERO	Scofield Canyons	DEER	Buck	9	1	9/11-11/10/2018	90:10	10181	40	Carbon/Utah	Renewal
SERO	Scofield Canyons	ELK	Bull	6	1	9/01-10/31/2018	80:20	10181	40	Carbon/Utah	Renewal
SERO	Scofield East	ELK	Bull	7	1	9/01-10/31/2018	85:15	11420	0	Carbon	Renewal
SERO	Scofield West	DEER	Buck	13	2	9/01-10/31/2018	90:10	11183	0	Carbon/Utah	Renewal

CWMU Recommendations

DWR_Region	CWMU_Name	Species	Sex	Rcmnd_Private	Rcmnd_Public	Rcmnd_HuntDate	Ratio	Acres_Private	Acres_Public	County	Comments
SERO	Scofield West	ELK	Bull	7	1	9/01-10/31/2018	85:15	11183	0	Carbon/Utah	Renewal
SERO	Soldier Summit	DEER	Buck	18	2	9/01-10/31/2018	90:10	24088	375	Carbon/Utah/Wasatch	Renewal
SERO	Soldier Summit	ELK	Bull	13	2	9/01-10/31/2018	85:15	24088	375	Carbon/Utah/Wasatch	Renewal
SERO	Spring Creek/Dodge	DEER	Buck	63	7	9/01-10/31/2018	90:10	83709	0	San Juan	Renewal
SERO	Spring Creek/Dodge	ELK	Bull	10	2	9/01-10/31/2018	80:20	83709	0	San Juan	Renewal
SERO	Summit Point	DEER	Buck	27	3	9/01-10/31/2018	90:10	26118	0	San Juan	Renewal
SERO	Summit Point	ELK	Bull	3	1	9/01-10/31/2018	75:25	26118	0	San Juan	Renewal
SRO	Alton	DEER	Buck	19	5	9/01-10/31/2018	90:10	39633	3845	Kane	Renewal
SRO	Alton	DEER	Mgmt Buck	4	1	9/01-10/31/2018	90:10	39633	3845	Kane	Renewal
SRO	Alton	ELK	Bull	8	2	9/01-10/31/2018	80:20	39633	3845	Kane	Renewal
SRO	Bar J Ranch	DEER	Buck	18	2	9/11-11/10/2018	90:10	5970	330	Sevier	Renewal
SRO	Bar J Ranch	ELK	Bull	9	2	9/01-10/31/2018	80:20	5970	330	Sevier	Renewal
SRO	Boobe Hole	DEER	Buck	18	2	9/11-11/10/2018	90:10	12000	0	Sevier	Renewal
SRO	Boobe Hole	ELK	Bull	14	1	9/01-11/20/2018	90:10	12000	0	Sevier	Renewal
SRO	Mt Carmel	DEER	Buck	20	2	9/11-11/10/2018	90:10	14891	460	Kane	Renewal
SRO	Oak Ranch	DEER	Buck	16	3	9/11-11/10/2018	90:10	4980	120	Sevier	Renewal
SRO	Old Woman Plateau	DEER	Buck	9	3	9/11-11/10/2018	90:10	6840	1280	Sevier	Renewal
SRO	Old Woman Plateau	ELK	Bull	8	2	9/01-11/15/2018	90:10	6840	1280	Sevier	Renewal
SRO	Pahvant Ensign	TURKEY	Bearded	15	15	2nd Sat in Apr-May 31st	50:50	37176	0	Millard	Renewal
SRO	Zane	PRONGHORN	Buck	3	2	9/01-10/31/2018	60:40	9635	0	Iron	Renewal

Landowner Association Recommendations

Association_Name	Species	Hunt_Area	Requested	Qualified	Recommended	App. Expiration
Deep Creek	Bull Elk	West Desert, Deep Creek	2	Same	2	September 1, 2020
Vernon	Buck Deer	West Desert, Vernon	36	28	28	September 1, 2020
Book Cliffs	Bull Elk	Book Cliffs, North	9	3	3	September 1, 2020
Book Cliffs	Buck Pronghorn	Book Cliffs, North	3	2	2	September 1, 2020
Book Cliffs	Buck Deer	Book Cliffs, North	13	Same	13	September 1, 2020
Diamond Mountain	Bull Elk	South Slope, Diamond Mountain	31	Same	31	September 1, 2020
Diamond Mountain	Buck Deer	South Slope, Diamond Mountain	48	Same	48	September 1, 2020
Three Corners	Bull Elk	North Slope, Three Corners	5	4	4	September 1, 2020
Pilot Mountain	Bull Elk	Pilot Mountain	2	Same	2	September 1, 2020
Elk Ridge (San Juan Deer)	Buck Deer	San Juan, Elk Ridge	2	Same	2	September 1, 2020
San Juan Elk	Bull Elk	San Juan, Bull Elk	5	Same	5	September 1, 2020
Monroe Mountain	Bull Elk	Monroe	4	Same	4	September 1, 2020
Pahvant Mountain	Bull Elk	Fillmore, Pahvant	6	Same	6	September 1, 2020
Panguitch Lake	Bull Elk	Panguitch Lake	7	5	5	September 1, 2020
Paunsaugunt	Buck Deer	Paunsaugunt	18	Same	18	September 1, 2020
Paunsaugunt	Mgmt Buck Deer	Paunsaugunt	4	1	1	September 1, 2020
Paunsaugunt Elk	Bull Elk	Paunsaugunt	6	Same	6	September 1, 2020
South Fork of Sevier River	Buck Pronghorn	Mt Dutton/Paunsaugunt, Johns Valley	6	Same	6	September 1, 2020
Indian Peaks	Bull Elk	Southwest Desert	3	Same	3	September 1, 2020

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
MICHAL D. FOWLKS
Interim Division Director

MEMORANDUM

Date: October 11, 2017

To: Wildlife Board and Regional Advisory Council Members

From: Phillip Gray, Licensing Coordinator

Subject: AMENDMENT TO RULE R657-67 UTAH HUNTING MENTOR PROGRAM RESULTING FROM S.B. 67

Senate Bill 67 entitled Hunting Mentor Program, passed through the 2017 legislative session and is now in effect. This bill removes specific conditions for participating in the Youth Mentor Hunting Program from statute and grants authority to establish conditions to the Wildlife Board in administrative rule. The Hunting Mentor Program has been very successful and provided thousands of big game hunting opportunities to Utah youth. The proposed changes will expand the program and provide additional high quality, mentored hunting opportunities to Utah youth.

We are proposing to amend rule R657-67 to:

1. Allow any person 21 years of age or older to mentor a resident youth on a hunt regardless of relationship with written permission from the parent or legal guardian.
2. Allow mentors to share any permit, not just big game with the exception of swan and sandhill crane due to conflicting federal regulations.
3. Allow a mentor to identify up to 4 youths to be mentored on a single tag.
4. Limit a youth to one mentored hunt of the same species and sex per hunt year regardless of any permits they may already possess.
5. Simplify age qualifications for participating mentors and youth.

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UTAH DNR WILDLIFE RESOURCES

R657. Natural Resources, Wildlife Resources.
R657-67. Utah Hunter Mentoring Program.
R657-67-1. Purpose and Authority. Under the authority of Utah Code Annotated Sections 23-14-1, 23-14-3, 23-14-18, 23-14-19, and 23-19-1, this rule creates a hunting mentor program that will increase hunting opportunities for Utah families and provides the procedures under which a minor child may share the permit of another to take [~~big game, including all big game general season permits, big game limited entry permits, once-in-a-lifetime permits, and all antlerless big game permits~~]protected wildlife.

R657-67-2. Definitions.

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

(2) "Hunting Mentor" means a Resident or Nonresident individual possessing a valid permit issued by the Division to take [~~a big game animal~~]protected wildlife in Utah and who is 21 years of age or older [~~when the big game animal is taken~~]at the time of application for the Mentor Program.

(3) "Qualifying Minor" means a Utah Resident who is under 18 [~~when engaged in a hunting related activity, and~~] at the time of application for the Mentor Program and who is otherwise eligible to lawfully hunt.

[~~(i) is the child, stepchild, grandchild, or legal ward of the Hunting Mentor; or~~]

[~~(ii) is suffering from a life threatening medical condition.~~]

(4) "Wildlife document" means a [~~big game~~]permit to hunt protected wildlife or Division-issued authorization to share such a[~~big game~~] permit.

R657-67-3. Requirements for Sharing Permits.

(1) A Hunting Mentor may lawfully share a permit with a Qualifying Minor, and a Qualifying Minor may lawfully take [~~big game~~]protected wildlife authorized by the Hunting Mentor's permit, if the following conditions are satisfied:

(a[~~) The Qualifying Minor is at least 12 years of age when hunting;~~][~~(b~~]) The Qualifying Minor has successfully completed a Hunter's Education Program recognized by the Division and possesses a Utah Hunter's Education number;

([~~c~~]b) The Hunting Mentor receives prior written approval by the Division authorizing the sharing of the permit;

([~~d~~]c) The Hunting Mentor receives no form of compensation or remuneration for sharing the permit with the Qualifying Minor;

([~~e~~]d) The Hunting Mentor accompanies the Qualifying Minor while hunting at a distance where the Hunting Mentor can communicate in person with the Qualifying Minor by voice or hand signals;

([~~f~~]e) The Hunting Mentor provides advice, assistance, and mentoring on sportsman ethics, techniques, and safety to the Qualifying Minor; and

([~~g~~]f) Both the Hunting Mentor and the Qualifying Minor otherwise comply with all laws, rules, and regulations governing the taking of [~~big game~~]protected wildlife as authorized by the permit.

(2) A Qualifying Minor does not need to possess a valid hunting or combination license to participate in the mentor program.

(3) A Hunting Mentor may name up to four individuals to mentor under a single permit.

(4)(a) A Qualifying Minor may [~~not simultaneously possess a permit for an antlered big game animal and share a permit for an antlered big game animal of the same~~]only share one permit for each species[~~.~~] and sex of protected wildlife per hunt year.

([~~4) A Qualifying Minor may not simultaneously share the permits of two or more Hunting Mentors if those permits are for the same antlered big game species.~~]b) A bobcat permit may only be shared under the Mentor Program if permit quotas are capped under the Bobcat Management Plan.

([~~5~~]c) A [~~Hunting Mentor~~]Qualifying Minor may [~~only~~]not share [~~their permit with one Qualifying Minor at a time~~]a swan or sandhill crane permit possessed by a Hunting Mentor.

R657-67-4. Administrative Process for Sharing Permits.

(1) The Hunting Mentor shall submit a complete application for participation in the [~~mentor program~~]Mentor Program and receive the Division's written authorization prior to sharing a permit.

(2) A complete application for the mentor program includes the following:

(a) A handling fee as established by the Utah Legislature;

(b) The Permit Number that is to be shared;

(c) A physically identifying description of the Qualifying [~~Minor~~]Minors;

(d) [~~The~~]Each Qualifying Minor's hunter education number;

(e) Written[~~ certification(s) of the following:~~]

[~~(i) That the Qualifying Minor is the child, stepchild, grandchild, or legal ward of the Hunting Mentor; or~~][~~(ii) That the Qualifying Minor has a life threatening medical condition; and the Hunting Mentor must also certify that they have received written~~] authorization from the Qualifying Minor's parent or legal guardian approving their participation in the hunting activity; and

(f) any wildlife document(s) that must be surrendered in order to qualify for the Hunter Mentoring Program.

(3) If a Qualifying Minor must surrender a wildlife document in order to qualify for the Mentor Program, that surrender must be done prior to or at the time of their application to the Utah Hunter Mentoring Program as described in R657-67-6.

(4) If a Hunting Mentor wishes to change the Qualifying Minor with whom they share their permit, they must:

(a) Surrender the authorization issued to the Qualifying Minor by the Division;

(b) Reapply with the Division to have a new Qualifying Minor participate in the mentor program in the same manner as described in this Section.

R657-67-5. Sharing the Permit in the Field.

(1) While in the field, the [~~Hunting Mentor must possess the following:~~][~~(a) All written certifications submitted to the Division for the~~]Qualifying Minor[~~'s participation in the mentor program;~~]

[~~(b) If the Hunting Mentor is not the Qualifying Minor's parent or legal guardian, the Hunting Mentor must also certify that they have received written authorization from the Qualifying Minor's parent or legal guardian approving their participation in the~~

~~hunting activity; and~~][~~(c) The authorization issued by the Division allowing the Qualifying Minor~~] must possess the Division-issued authorization to share in the use of the Hunting Mentor's permit[~~;~~].

(2) [~~Both the~~]A Hunting Mentor may only mentor one Qualifying Minor in the field at a time.

(3) Only one Qualifying Minor and the Hunting Mentor may carry a legal weapon in the field[~~ if they have satisfied the requirements to participate in the Mentoring Program~~].

([~~3~~]4) [~~Big game~~]Protected wildlife taken by a Qualifying Minor shall be tagged with the Hunting Mentor's permit in the same manner as if the Hunting Mentor was the individual taking the animal.

([~~4) Only one big game animal may be taken under a shared permit~~]5) Take limitations and bag limits apply based upon the permit issued, and the issuance of written authorization to share the permit does not confer additional rights to take [~~big game~~]protected wildlife.

R657-67-6. Variances, Surrenders, Refunds, Special Accommodations, and Administrative Details.

(1) The surrender of a wildlife document shall generally be in accordance with R657-42-4.

(2) Notwithstanding R657-42-4, a Qualifying Minor may surrender a wildlife document in their possession as part of their application to participate in the Hunter Mentoring Program, consistent with the following:

(a) the timeframe for a Qualifying Minor to surrender a permit is defined in this Section;

(b) A Qualifying Minor may surrender a wildlife document obtained as part of a group application and have their bonus points or preference points reinstated and waiting period waived without requiring all group members to also surrender their permits; and

(c) A Qualifying Minor who wishes to surrender a wildlife document after the opening day of that hunt may only do so if:

(i) they did not hunt under the authorization of that wildlife document; and

(ii) their legal guardian submits a signed affidavit certifying that the Qualifying Minor did not hunt under that wildlife document.

(4) All variances, refunds, and accommodations for people with disabilities shall be based on the type of permit that is shared and the individual using the wildlife document.

(5) All bonus points, reference points, and waiting periods shall be assessed to the Hunting Mentor.

KEY: wildlife, game laws, hunter education
Date of Enactment or Last Substantive Amendment: [~~July 8,~~]February 10, 2014
Notice of Continuation: New Rule
Authorization, and Implementing or Interpreted Law: 23-14-1, 23-14-3, 23-14-18, 23-14-19, and 23-19-1.