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Prepared by:



UTAH DIVISION OF WILDLIFE RESOURCES

Juab Area Wildlife Management Areas

Habitat Management Plan

Central Region Habitat Section

04/01/2024



Juab Area Wildlife Management Areas

Habitat Management Plan

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Date:

DRAFT

Habitat Management Plan for Wildlife Management Areas (WMAs) in the Juab Area

Executive Summary - April 2024

This habitat management plan (HMP) contains the following sections:

- **Background information** (purpose of Division ownership, public recreation opportunities, historic uses, key wildlife species, etc.)
- **Property information** (property description, acquisition history, encumbrances, etc.)
- **Property inventory** (capital improvements, existing habitats, etc.)
- **Management goals and objectives**
- **Strategies for property management**
- **Strategies for habitat management**
- **Appendices** contain location maps of the WMAs and an access plan which explains public access opportunities.

There are seven properties covered in this Habitat Management plan totaling 16,008 acres. The WMAs were originally purchased for big game habitat values. As a result, mule deer and elk are the primary beneficiaries of the WMA, especially during winter months when they come down from higher elevation summer ranges on Mount Nebo to winter.

This HMP provides management direction to Utah Division of Wildlife Resources personnel for the WMA contained herein. Listed below is a short summary of the contents of the HMP.

PRIMARY PURPOSE OF WMAS: To preserve and protect big game winter and transitional range and reduce depredation by deer and elk on surrounding private lands.

WILDLIFE SPECIES: The WMAs contain habitat for the following wildlife species: mule deer, elk, rocky mountain bighorn sheep, black-tailed jackrabbit, golden eagle, bear, cougar, and coyote. A variety of upland game species also inhabit these WMAs including chukar partridge, dusky grouse, Rio Grande turkey, cottontail rabbit, and mourning dove. Neotropical migratory birds can also be found in sagebrush and mountain brush habitats during their breeding and nesting seasons in spring and early summer months.

SPECIES OF GREATEST CONSERVATION NEED: There are SGCN animal species that inhabit habitats in and around these WMAs including Golden eagle, swainson's hawk, lewis woodpecker, Long billed curlew, rubber boa and Western milksnake. There are 2 sensitive plants that are found on a couple of WMAs in this plan including tidestrom beardtongue (*penstemon tidestromii*) S2S3,G2G3 and kings aster (*tonestus kingii* var. *kingie*) S3G3.

HABITAT CONDITIONS/PROBLEMS: The WMAs contain a variety of habitat types beginning with big sagebrush at the lower elevations, transitioning to gambel oak with sagebrush, then mixed mountain brush and aspen conifer types at the highest elevations. Overall the habitat conditions are in fair to good condition. Big sagebrush densities on some areas of the WMAs have declined over the years primarily due to poor recruitment and competition with perennial and invasive annual grasses and juniper and pinyon pine trees.

The creation of new unauthorized roads and trails on the WMA is an on-going problem that is difficult to control. The Division will work with Juab County, local municipalities and law enforcement

agencies, private landowners, and other state and federal land management agencies to manage OHV activity in a responsible manner that does not negatively impact the WMAs and still allows for management goals to be met. The Division will work with WMA visitors to ensure that all activities are in compliance with administrative rule R-657-28, Use of Division Lands.

ACCESS PLAN: Motorized vehicle traffic will be confined to existing roads and trails. Roads will be maintained as needed to maintain public access. Unauthorized user created roads and trails will be closed and rehabilitated.

MAINTENANCE ACTIVITIES: Fence inspection, repairs, replacement, gates, locks, road grading as needed, road closures, boundary signs, entry signs, surveys, and noxious weed control will occur annually. Annual weed control is a priority to keep weeds from expanding.

HISTORY OF WILDFIRES: Fire can have a significant impact on the WMAs and the mule deer carrying capacity due to the destruction of winter forage in the form of big sagebrush and bitterbrush, both of which are not fire tolerant. Several WMAs in this plan have been impacted by wildfires in the past, including the 2007 Salt Creek fire, 2014 Levan fire, 2020 Rocky Ridge and Williams fires.

HABITAT IMPROVEMENT: In order for the WMA to reach its potential as critical big game winter range, browse communities need to be enhanced and protected. The Division may employ a variety of methods to achieve this including prescribed grazing, prescribed burning, reseeding and seedling transplants, and mechanical treatments. Grazing will be utilized as a habitat management tool. High intensity short duration grazing systems during spring and early summer months will be used to improve browse communities for wintering big game. Water developments should only be pursued if they help reach the management objectives of the WMAs. Water developments that would result in big game becoming year-round residents on these important winter ranges should be discouraged. Water development projects that help with the grazing management plan should be pursued.

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Habitat Management Plan for Wildlife Management Areas (WMAs) in the Juab Area 2024

I. BACKGROUND INFORMATION

INTRODUCTION

This management plan has been developed to guide management on some of the lands owned by the Utah Division of Wildlife Resources (UDWR) in Juab County. There are seven WMAs covered in this Habitat Management plan totaling 16,008 acres. The WMAs were originally purchased for big game habitat values. As a result, mule deer and elk are the primary beneficiaries of the WMA, especially during winter months when they come down from higher elevation summer ranges on Mount Nebo to winter.

PURPOSE OF DIVISION OWNERSHIP

The WMAs in this Habitat Management Plan (HMP) were acquired primarily to protect, preserve, and enhance critical big game winter and transitional ranges. These WMAs can also provide a variety of recreational and access opportunities including hunting, hiking, camping, and limited OHV use, as long as they are compatible with the primary purpose of WMA.

HISTORIC USES

Prior to Division ownership, these WMAs were used primarily for livestock grazing, agriculture and some mineral extraction. Hunting, camping, hiking, off-highway-vehicle (OHV) use, and antler hunting were also common activities.

PUBLIC RECREATION OPPORTUNITIES

All activities occurring on Division lands are managed under the direction of the Division's land use rule. Rule R657-28 discusses approved uses, prohibited activities, and the process for applying and receiving the various permits required to use Division lands. The Division will work with WMA visitors to ensure that all activities are in compliance with this rule.

The WMAs in this plan are popular for big game hunting. There are limited opportunities for upland game hunting as well as hunting and trapping for mountain lions and furbearer species. Non-consumptive uses include camping, hiking, horseback riding, and wildlife viewing. Open fires will be allowed on the WMA, but this activity is subject to state and federal policies and guidelines including closures during high risk fire season.

Seasonal closures will be implemented on all Division roads for all motorized vehicle access on the Juab county WMAs from December 1 to April 30. See the access plan in Appendix B for maps of authorized roads. Seasonal closures are used to protect wildlife, wildlife habitat, and wintering big game animals from disturbance during critical winter months and to preserve habitats from being negatively impacted during wet, winter months.

PUBLIC ACCESS

Currently there are abundant opportunities for access to the WMAs. Motorized access is limited to authorized routes as shown on the unit access maps in Appendix B. At the present time there are seasonal restrictions on motorized access from December 1 to April 30. Additional information on public access and motorized vehicle use on the WMA can be found in the access management plan which is included as Appendix B.

CAMPING

Camping is permitted on the WMAs and unless posted otherwise, is limited to 14 days as noted in Rule R657-28-4(1) I. The Division reserves the right to change the length of camping stays if needed to reach the goals and objectives of the habitat management plan. Any changes in camping regulations will be posted.

CAMPFIRES

Open fires will be allowed, but this activity is subject to state and federal policies and guidelines, including closures during high-risk fire seasons. Non-combustible materials cannot be used in the building of fires and must be removed. The Division reserves the right to ban open fires on the WMAs if needed to protect valuable wildlife habitat on the WMAs and adjacent private and municipal lands. The Division may also restrict open fires to designated areas if the use of open fires becomes a management problem.

OHV USE

OHV use is permitted, but is restricted to authorized roads and trails (see Appendix B, Access Management Plan). Some of the WMAs have been impacted by motorized recreation resulting in the creation of numerous unauthorized roads/trails. Regional personnel annually work to close and rehabilitate unauthorized roads/trails in an attempt to preserve and protect wildlife habitat. These efforts will not be successful unless WMA visitors adhere to the Division's OHV and motorized vehicle rules by staying on authorized roads and trails.

KEY WILDLIFE SPECIES

As previously described, the WMAs contained in this HMP were originally purchased for big game habitat values, primarily for mule deer. As such, mule deer and elk are the primary beneficiaries, especially during winter months.

A variety of upland game species also inhabit the WMAs, including dusky grouse, Rio Grande wild turkey, cottontail rabbit, and mourning dove. Neotropical migratory birds can also be found in sagebrush and mountain brush habitats during their breeding and nesting seasons in spring and early summer months.

The WMAs are also home to numerous other species at some time during the year, including black bear, mountain lion, fur bearers (bobcat), upland game (chukar, dove, cottontail, etc.), raptors, neotropical migratory birds, and various small mammals.

GRAZING

Grazing is used as a management tool to enhance wildlife habitat, primarily big game winter range. Grazing can help the Division achieve wildlife habitat goals by reducing fire danger and releasing browse species to provide winter forage for big game. The Livestock Grazing Plan' is included on page 21 of this HMP and outlines specific grazing activities and a complete grazing schedule.

II. PROPERTY INFORMATION

PROPERTY DESCRIPTIONS

This Habitat Management Plan (HMP) includes seven (7) Wildlife Management Areas (WMAs) totaling approximately 16,008 acres. The WMAs include the following: Santaquin, West Hills, Mona Bench, Salt Creek, Triangle Ranch, Levan and Deep Creek. All of the WMAs presented here occur in Juab County with the exception of the northern third of the Santaquin WMA and portions of the West Hills WMA which are in Utah County.

The WMAs contained in this HMP are fee title lands owned by the Utah Division of Wildlife Resources (UDWR) acquired with the cooperation of the US Fish and Wildlife Service, Federal Aid Division. Copies of deeds for the WMAs can be found in either UDWR's Salt Lake Office, 1594 West North Temple, Salt Lake City, UT, 84114 or the Central Region office at 1115 North Main Street, Springville, UT, 84601.

Santaquin WMA

The Santaquin WMA is the largest WMA in this plan, consisting of 4,851 acres. It occurs on the east side of Interstate 15 from Santaquin Canyon on the north end and continues four miles south to Wash canyon. The northern 1,819 acres of this WMA occurs in Utah County. The elevation ranges from 5,000 feet near I-15 on the west side of the property to 7,765 feet on the southeast portion of the WMA. Habitat ranges from lowland and mountain big sagebrush habitats on the west with increasing juniper and pinyon to the east and north. Curlleaf mahogany and bigtooth maple habitats can be found scattered through the center of the WMA at mid elevations. Rocky mountain gambel oak-mixed mountain shrubland is more prominent in the higher elevations to the southeast. At the highest elevations on the southeast corner of the property there are some aspen and mixed conifer woodlands.

The legal description is; Township 10S, Range 1E, Sections 12-14, 23-27, 33-36 and Township 11S, Range 1E, section 3, which may or may not include all of the sections listed. The property was purchased from several landowners beginning in 1970 and ending in 1989. See appendix C for a detailed description of land acquisition.

An active surface calcite mine can be found on the SE ¼ of SE ¼ of section 14, and NE ¼ of NE ¼ of section 23, T 10S, R 1E. This mine has been in operation since the 1950s and provides calcite minerals for various uses including chicken feed supplements. This mine existed before the DWR acquired the WMA and the owner retained the mineral rights when the property was sold to the Division. The operators of the mine have an active permit with the Division of Oil, Gas and Mining of the Department of Natural Resources.

West Hills WMA

The West Hills WMA consists of 754 acres which occurs along the top of the ridge on the west side of the Juab Valley, south of Rocky Ridge and north of Mona reservoir. This narrow property straddles the Utah and Juab County line with 192 acres occurring in Utah County and 562 acres in Juab County. Elevations range from 5,000 feet on the northeast near Rocky Ridge to a high point of 5,977 feet on the southwest. Habitat consists of inter-mountain basin montane sagebrush steppe with scattered patches of juniper woodlands. Most of the juniper has been affected by past wildfires leaving dead standing trees.

The legal description is; Township 10S, Range 1E, Sections 21, 28, 29-31. Only portions of these sections are owned by the DWR. All of the property was acquired from the Nature Conservancy in 1985. See appendix C for a list of parcel information.

Mona Bench WMA

The Mona Bench WMA occurs on the east side of Interstate 15. It is a long narrow rectangular strip of critical big game winter habitat a little over 4 miles long and $\frac{3}{4}$ of a mile in width in most places. The property sits at the base of Mount Nebo with the east border of the WMA adjacent to the Mount Nebo wilderness area. Elevation ranges from 5,000 feet on the west side of the WMA near I-15 to a high of 7,600 feet on the southeast corner. Habitats include lowland sagebrush on the lower elevations with a mixture of patchy gambel oakbrush and mountain big sagebrush farther east.

There are five isolated smaller parcels that are included with this WMA ranging in size from 2.5 acres to 80 acres. The Legal description is; Township 11S, Range 1E, Sections 10, 15, 22, 27, 28, 34, which may or may not include all of the sections listed. A 2.5 acre isolated parcel is located in section 21. Three isolated parcels of 5.5, 10 and 41 acres occur in Township 12S, Range 1E, Sections 4, 5, and 9.

Nephi Canyon WMA

This WMA consists of 5 different properties that occur on the north side of Nephi Canyon totaling 2,078 acres. The western 4 parcels have also been called the Salt Creek WMA and the parcel farthest east was previously called the Hop Creek WMA. To avoid confusion with another Salt Creek in the DWR's Northern Region, these properties will now collectively be called the Nephi Canyon WMA.

Elevations range from 5,200 feet on the northwest side of the WMA near I-15 to a high of 7,400 feet on the east side of the northernmost parcel which borders the Mount Nebo Wilderness area. There is some lowland sagebrush habitat on the lowest elevations of the WMA. Mountain big sagebrush habitat is the most abundant type with some gambel oak mixed montane shrubland at the higher elevations.

Three parcels of land totaling 1,221 acres were acquired in 1975 and 1976 from the Department of Interior, Bureau of Land Management under the provisions of the Recreation and Public Purposes Act of June 24, 1926 (44 Stat. 741). The legal description of these parcels is, Township 12 S, Range 1 E., Section 25, NW $\frac{1}{4}$ NW $\frac{1}{4}$, Section 26, N $\frac{1}{2}$ N $\frac{1}{2}$, Section 27, N $\frac{1}{2}$, NE $\frac{1}{2}$, Section 28, lots 1,2 4, NE $\frac{1}{4}$ SE $\frac{1}{4}$. Section 35, NE $\frac{1}{4}$ SE $\frac{1}{4}$, SE $\frac{1}{2}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$

SE ½. Township 13S Range 1E Section 2, N ½ NW ¼, NW ½, Section 3, NE ¼ NE ¼.
Township 13S Range 2E Section 6. N ½ N ½ .

The 733 acre Hop Creek parcel on the west side was acquired from James and Alvaretta Bean from Nephi in 1967. The legal description of the Hop creek parcel is Township 13S, Range 3E section 3: Lot 4, SW ¼, NW ¼, W ½ SW ¼ 160.64 acres. Section 4: Lots 1-4, S ½ NE ¼, 521 acres. Section 9: NW ¼ NE ¼ 40 acres.

The 120 acre parcel on the east side near Interstate 15 was acquired from Preston and Helen Jones of Nephi in 1955. The legal description of this parcel is Lots 2, 3 and 4, Township 13S, R1E Section 34. See appendix C for more information on acquisition history on this property and others in this plan.

Triangle Ranch WMA

The 4,805 acre Triangle Ranch WMA is located just east of the town of Nephi and south of highway 132 that runs east up Salt creek or Nephi canyon. This large WMA ranges in elevation from approximately 5,500 feet on the far west side and increases in elevation to nearly 7,500 feet as you travel east toward the San Pitch Mountains. Sagebrush habitats are found at the lower elevations transitioning to pinyon and juniper woodlands and mixed mountain shrubland farther east with some mixed aspen conifer habitat at the highest elevation on the southeast corner of the WMA.

The Legal description is; Township 13S, Range 1E, Sections 3 and 10-15 which may or may not include all of the sections listed. Most of the Triangle Ranch property was purchased from Triangle Ranch Inc. in 1968. A 120 acre parcel from section 15 was acquired from the Bureau of Land Management in 1976 under the provisions of the Recreation and Public Purposes Act.

Levan WMA

The Levan WMA contains 2,875 acres on the east side of the Juab valley about 6 miles south of the town of Nephi and about 2 miles northeast of Levan. Elevation ranges from 5,500 ft on the west side to nearly 6,700 feet at the highest point on the far east side of the property. This WMA consists of some old rangeland pastures on the west side of the property with a mixture of perennial grasses and sagebrush. Mountain big sagebrush and juniper-pinyon woodlands are abundant as you go east with gambel oak mixed montane shrubland at the higher elevations on the east side of the property.

The Legal description is; Township 14S, Range 1E, Sections 16, 17, 20-23 and 28 which may or may not include all of the sections listed. The Levan WMA property was purchased from several different landowners starting in 1946 and ending in 1978. See appendix C for more detailed information on acquisition history and encumbrances.

Deep Creek WMA

Deep Creek WMA contains 1,196 acres of land about 2 miles south of the town of Levan and east of highway 28. Elevation varies from approximately 5,300 feet near the highway to 6,200 feet about 1 mile away on the eastern edge of the WMA. The west side of the property consists of lowland and mountain sagebrush habitat with scattered juniper trees. Slopes steepen a

quarter to a half mile east of highway 28 and consists of mostly juniper and pinyon woodlands with some gambel oak habitats at the higher elevations on the southeast portion of the WMA.

The Legal description is; Township 15S, Range 1E, Sections 6, 7 and 18 which may or may not include all of the sections listed. A small portion of the WMA occurs in Township 15S, Range 1W Sections 13 and 24. The property was purchased in several pieces primarily from the Ferrell Wankier family from 1974 to 1988. See appendix C for more detailed information on acquisition history and encumbrances.

LAND ACQUISITION HISTORY

The WMAs contained in this HMP were primarily acquired through federal aid programs with the U.S. Fish and Wildlife Service (USFWS).

- Project W-118-L: North Nebo Big Game Winter Range project, Santaquin, Mona Bench, West Hills, and Nephi Canyon WMAs.

Because federal funds were used in the acquisition of these properties, the Division is required to comply with all USFWS requirements, which includes the National Environmental Policy Act (NEPA) guidelines when considering actions that could affect the environment. The DWR may not dispose of any portion of the property without USFWS approval.

Purchasing details for each WMA are included in the previous property description section and in appendix C.

ENCUMBRANCES

The UDWR generally obtained only the surface rights to the lands they acquired. The oil, gas, mineral, coal, and geothermal rights appurtenant to the lands were generally retained by the sellers or grantors of those respective lands, including the State Institutional Trust Lands Administration (SITLA). The sellers or grantors generally also retain the right to lease the rights of egress and ingress for the exploration, development and removal of those minerals. However, the seller or lessee shall compensate UDWR for interference with or damages to UDWR's surface lands which have resulted from activities related to minerals exploration or removal.

Santaquin WMA: J.B. Ranch retained mineral rights, except sand and gravel. They also retained the water rights to an existing well located in the SE $\frac{1}{4}$ of section 22 T 10S, R 1E.

The State Road Commission has an easement for a drainage facility (.10 acres) also in section 22.

Mineral rights, except sand and gravel, a utility easement for power lines and conduit, and water rights were retained on lands purchased from the Nature Conservancy. Associated with these lands are ponds developed by the Allred family located in the E $\frac{1}{2}$ of section 34, T 10S R 1E.

The Federal Aviation Administration has an easement for a radio communications link repeater facility located in the NE $\frac{1}{4}$ of section 22, and part of the SE $\frac{1}{4}$ of section 15, T 10S R 1E.

West Hills WMA: This property was acquired from the Nature Conservancy in 1985. They retained all mineral, oil, coal and natural gas but not including sand and gravel.

Mona Bench WMA: Herman Young retained mineral rights, except sand and gravel, and an access easement on the E ½ SW ¼ of section 27, T 11S, R 1E.

Clark Molyneaux and Janice Pritchett retained mineral rights, except sand and gravel in the SW ¼ of NW ¼ of section 34, T 11S, R 1E.

Herman Young has an easement for a 2,206 foot long water line that transports water from a spring in the mouth of Pole canyon across Division land in section 22, T 11S R 1E. Live water is to be made available for wildlife at the spring source.

Wallace Kay has an easement to transport water from a spring in the mouth of Bear Canyon across 2,600 feet of Division land in section 27, T 11S, R 1E.

Nephi Canyon WMA: Most of this WMA was acquired by the Department of Interior who retained all mineral rights and a right-of-way for all ditches and canals.

James and Alvaretta Bean who sold the Division the Hop Creek parcels, retained all mineral rights but not including sand and gravel.

There is an existing power line going through three of the Nephi canyon WMA parcels with right-of-way easements in place. Two new power lines are being built during the next few years which will parallel the existing power line corridor. The Energy Gateway South powerline is beginning in 2023 and the Transwest Express powerline will follow in the near future.

Triangle Ranch WMA: Triangle Ranch Inc. retained all mineral, oil, coal and natural gas except sand and gravel.

Levan WMA: Charles and Emma Mangelson retained all mineral, oil, coal and natural gas except sand and gravel. Farrel and Deanna Wankier retained all mineral, oil and natural gas rights. The property purchased from the State of Utah retained a right-of-way for roads, ditches, canals, or transmission lines existing on the property.

Deep Creek WMA: Ferrel Wankler SR and Jr retained all mineral, oil and gas rights but not sand and gravel. Lois Brough, Golden and Romaine Mangelson retain all mineral and oil rights.

See appendix C for a detailed description of property acquisition history and encumbrances.

III. PROPERTY INVENTORY

EXISTING CAPITAL IMPROVEMENTS

Most of the existing improvements on the WMAs include roads, fences, cattle guards and guzzlers. Roads and fences are maintained on an annual basis or as needed. Guzzlers that collect water for wildlife use have also been constructed on some of the WMAs in this plan. See the Access Management plan in appendix B for maps showing roads and fences on these properties.

ROADS

Santaquin WMA: This WMA contains a paved county road on the north end of the property that goes up Santaquin Canyon. Another dirt county road further south goes up Pole Canyon and crosses the WMA before ending on private property. A dirt road enters the WMA farther south on the west side of the property that is maintained by the county. On the south end of the WMA is another dirt road that accesses Forest Service property on the east side of the WMA. See the access management plan for detailed maps of the roads and designations on the WMA. These County roads are open year-round. Other roads and trails on the WMA are closed to motorized vehicles from December 1st until April 30th. A few roads on the WMA are restricted to administrative access only.

West Hills WMA: This property has a few primitive dirt roads that were most likely user created before DWR ownership. There is a road that goes down the ridge top from the north end of the property most of the way to the southern end. The steep terrain prevents motorized access on much of the property. Access to the road system requires traveling across private property.

Mona Bench WMA: There is a dirt County road crossing the north portion of the WMA that accesses Mona Pole Canyon and Forest Service land. There are only a few primitive roads on the rest of this property.

Nephi Canyon WMA: The parcels that makeup this WMA are isolated and mostly in difficult terrain. There are a few primitive roads and tracks on two of the 4 parcels. The coming power lines will be creating some new roads on 4 of the 5 parcels making up the Nephi Canyon WMA. These roads will be open temporarily during construction.

Triangle Ranch WMA: There is only 1 main road on this WMA and a few primitive user created ATV trails on the southwestern part of the property.

Levan WMA: There is an improved County dirt road that traverses the WMA on the west side of the property. The dirt road on the southwest half of the property was improved after the DWR purchased the property to allow trucks to move material to highway 28 without the need to drive these trucks through the town of Levan. There are a few other unimproved dirt roads on the property.

Deep Creek WMA: There is an improved County dirt road traversing the south portion of the WMA. This road travels up Deep Creek onto U. S. Forest property that borders the Deep Creek WMA on the east side. There is one other dirt County road on the far southwest side of the property. The only other roads on the property are a couple of short administrative access only roads on the northwest side of the WMA.

FENCES

Most of the WMAs in this plan have various amounts of mostly property boundary fencing. These fences are of various ages and conditions. Boundary fences are mostly 4 strand wildlife friendly barbwire type fencing with the top wire no more than 42 inches from the ground to allow easier crossing by big game animals.

GUZZLERS

Guzzlers are devices that capture rainwater and store it for use by wildlife. There are guzzlers located on some of the WMAs in this plan. Guzzler locations are not public information and not shown on any maps. This is primarily to protect these structures from human disturbance, vandalism and hunting pressure. Guzzlers are of 2 types, smaller 300 to 500 gallon upland game guzzlers and larger 1,800 gallon big game guzzlers. There are a combination of these types of guzzlers on some of the WMAs in this plan.

HABITAT IMPROVEMENT PROJECTS

Other improvements include habitat improvement projects which are mentioned here. See the following table for information about projects that have occurred on the WMAs of this HMP. These projects can be found on the WRI database (wri.utah.gov) which includes details of the projects, budgets, funding sources and photos.

Juab County WMAs Habitat Improvement Projects				
Project no.	Project Name	Year	Treatment Type	Acres
271	Levan WMA Habitat Improvement	2007	Lop & Scatter	700
322	San Pitch CWMA Noxious Weed Inventory	2007	Weed inventory	5,000
970	Salt Creek Fire Wildfire Rehabilitation - DWR Lands	2007	Aerial seeding and chaining	1,150
1303	Santaquin WMA Wildfire Rehab Project	2008	Harrow and seeding	76
3192	Levan Fire Rehailitation	2014	Aerial seeding and chaining	1,023
3228	Santaquin WUI	2016	Bullhog	512
3447	Triangle Ranch WMA Bullhog project	2016	Bullhog	300
3894	Santaquin WMA Winter Range Enhancement	2019	Shrub seedling planting	20
3954	Levan WMA Bullhog	2019	Bullhog	709
5279	Central Region Shrub Restoration Project FY-21	2021	Shrub seedling planting	20
5524	Williams Fire Rehabilitation Project	2020	Aerial seeding fire scar	618
5562	Santaquin and Mona Benches WMA Shrub Restoration	2021	Shrub seedling planting	20
5734	Levan WMA Shrub Planting Project FY-22	2021	Shrub seedling planting	20
5863	Triangle Rance WMA Boss Tank Guzzler Project	2022	Guzzler	1
5955	Levan WMA Shrub Planting Project FY-23	2022	Shrub seedling planting	20
			Total	10,189

CULTURAL RESOURCES

Numerous historic and prehistoric sites have been identified in and around the WMAs in this HMP. Caution should be used before any ground disturbing activities are planned or approved within any of the properties to ensure that cultural resources are adequately identified and avoidance measures are taken.

SPECIES OF GREATEST CONSERVATION NEED

A search of the Division's Natural Heritage database resulted in the following species of greatest conservation need (SGCN) which are found on or in close proximity to the WMAs in this HMP.

PLANTS

Kings aster (*Tonestus kingii* var. *kingie*) S3G3 was found on the Mona bench WMA at the mouth of Bear Canyon. Tidestrom Beardtongue (*Penstemon tidestromii*) S2S3,G2G3 was found on the Triangle Ranch WMA.

BIRDS

Golden eagle (*Aquila chrysaetos* S4, G5) nests have been found on the Deep Creek WMA just north of Deep Creek. There are also several golden eagle nest locations just south of the Levan WMA in and around Chicken and Pigeon Creeks. Swainson's hawks (*Buteo swainsoni* S3B, G5) have been identified just west of the Mona Bench WMA. Lewis woodpeckers (*Melanerpes lewis* S3, G4) have been found just east of the Nephi canyon WMAs and long billed curlew (*Numenius americanus* S3B, G5) occur just west of the Levan WMA.

REPTILES

Western milk snakes (*Lampropeltis gentilis* S3, G5) and rubber boa have been found just east of the Santaquin WMA.

IMPORTANT FISH AND WILDLIFE HABITATS

All seven of the WMAs covered in this plan are primarily classified as winter and winter/spring range for mule deer and elk. The aspect of most of these properties is generally west and south. The Santaquin, Mona bench, Nephi Canyon and Triangle Ranch WMAs are bordered on the west by the I-15 freeway. This concentrates wintering big game to a narrow strip of winter range about 1 mile or less wide as they are prevented from moving west of the freeway corridor.

The upper elevations also provide important transition habitat for big game traveling to and from winter ranges. Mammalian carnivores, primarily mountain lions, also frequent the WMAs in winter months as they follow annual winter migrations of big game herds. The vegetation zones occupied by sagebrush and other mountain browse species provide important breeding and nesting habitats for neotropical migratory birds.

GENERAL CONDITIONS OF HABITATS

HABITAT TYPES

Most of the WMAs consist of mountain big sagebrush/grass and mixed oak/sagebrush habitat types with increasing amounts of mountain shrubland at higher elevations. The lower elevation sagebrush habitats are generally in poor condition and contain various amounts of encroaching juniper and pinyon trees. Occasional wildfires have also affected sagebrush habitats on the Santaquin, Mona Bench, West Hills, Nephi Canyon and Deep creek WMAs. See table below for fire information affecting these WMAs. Also see page 9 for information on fire rehabilitation projects completed on some of these fires.

WMA	Fire	year	Acres
Nephi Canyon	Salt Creek Fire	2007	733
Deep Creek	Levan Fire	2014	675
Santaquin	Williams Fire	2020	1139
Mona Bench	Williams Fire	2020	201
West Hills	Rocky Ridge Fire	2020	237

Habitat treatments are necessary to improve these habitats and maintain the sagebrush types vital for wintering big game animals. Mountain shrub habitats are also numerous on the WMAs at higher elevations. These habitat types are generally stable and in good condition.

RANGE AND WATERSHED CONDITIONS

The Division's Big Game Range Trend Studies program monitors big game habitat conditions statewide by sampling permanently placed vegetation transects established in key areas. Transects are read on a 5-year rotational schedule based upon the Division's five administrative regions. There are 12 Range Trend study sites on or adjacent to the Santaquin, Mona Bench, Nephi Canyon, Triangle Ranch, Levan and Deep Creek WMAs. The following list contains each study by name and study number.

- Santaquin Bench 16A-2
- Santaquin Hill 16A-3
- Steele Ranch 16A-13
- North Canyon 16A-10
- Willow Creek 16A-7
- Birch Creek 16A-9
- Gardner Canyon 16A-8
- Hop Creek Browse 16A-6
- Triangle Ranch 16A-20
- Levan North 16A-22
- Chicken Creek 16A-17
- Deep Creek 16A-18

The Range Trend study sites were established in 1989 and reread in 1997, 2002, 2007, 2012, 2017 and 2022. Statewide range trend data and digital photographs for specific sites can be

found at the following web address: <https://wildlife.utah.gov/range-trends.html>

HABITAT LIMITATIONS

Healthy sagebrush is limited on some of the WMAs. In most areas, pinyon and juniper tree encroachment and loss of shrubs to wildfire are the primary problems. Keeping sagebrush stands healthy will be a key goal in managing these properties into the future. Livestock grazing is used as a tool to improve the health of sagebrush stands on the Santaquin, Mona Bench and Levan WMAs. However, cattle grazing will not address conifer invasion. Mechanical treatments will need to be an ongoing aspect of habitat management on these properties.

A more detailed discussion of these limitations and their associated solutions can be found in the habitat improvement section of this HMP.

HUMAN USE - RELATED PROBLEMS

The WMAs in this plan are used by the public for recreation and hunting. Unauthorized activities do occur on the WMAs and often create conflicts between users and place a heavy maintenance burden on the Division. While public recreation is encouraged, use of these lands by the public must be conducive to the purpose for which these parcels were acquired and should not become barriers to the Division being able to reach the management goals and strategies presented in this HMP.

MOTORIZED VEHICLES

The WMAs receive significant motorized vehicle use, especially from OHVs. While this is an approved activity, OHV and motorcycle use of the WMA needs to be closely managed. See Appendix B for the Access Management Plan and access maps for each property. Unmanaged motorized vehicle traffic, especially during winter and spring months, has resulted in degradation of access roads and critical habitats and fragmentation of crucial big game winter ranges. The Division will work with Utah/Juab County, local municipalities, law enforcement agencies, private landowners, OHV groups, and other state and federal land management agencies to manage OHV activity in a responsible manner that maintains public access to the WMAs, while helping the Division achieve its management objectives.

TARGET SHOOTING

Target shooting is a problem on some of the WMAs in this plan, particularly the Santaquin WMA. Target shooting on the northwest part of the WMA started causing problems with the housing development adjacent to the WMA and to the north. Houses were being impacted with stray bullets. The City of Santaquin and the DWR worked together to close this area to shooting. See shooting closure map in appendix B.

Farther south in the Steele Ranch area of the WMA target shooting is also popular, especially long range shooting. The DWR does not prohibit this activity but it is not something that is encouraged. Too much shooting activity is a safety problem and not conducive to the primary purpose of the WMA to protect big game winter range and wintering animals. Shooting in this area has caused damage to the power lines running south and has resulted in three fires on the WMA. Trash from targets, brass, and spent shotgun shells are also a problem in this area

requiring annual trash pickup. Shooting at signs, kiosks, gates and fences is another problem requiring annual maintenance of this infrastructure. DWR may close this area to shooting if these problems get worse. DWR is working with the city of Santaquin and Utah County on finding a solution to this problem in the form of a dedicated shooting range somewhere in the south end of Utah County. The Division is supportive of a dedicated shooting range in southern Utah County but will not entertain the idea of placing it on DWR property.

LITTERING

Littering and trash dumping is a problem in certain areas of the WMAs. Littering and dumping of all forms of trash, including yard waste, is prohibited on the WMAs. The prohibition of littering will be enforced. The Division will work to adequately sign the WMA to inform the public that littering and dumping of garbage is prohibited and encourage better stewardship of these important areas for wildlife.

CAMPING

Most camping that occurs on the WMA is related to big game hunting. Camping is limited to 14 consecutive days unless otherwise posted and/or a special use permit has been obtained from the Division authorizing a different term.

ADJACENT LAND USES AND POTENTIAL IMPACTS

Some of the lands adjacent to the WMA are privately held agricultural lands, county/municipal lands or National Forest lands within the Uinta-Wasatch-Cache National Forest. Big game depredation on adjacent private agricultural lands is a problem in some areas. Continued growth in the Mona area may place increasing market pressures for private landowners to sell land for housing developments in the future.

ZONING AND LAND USE ORDINANCES

The northern portion of the Santaquin WMA in this plan falls into the Critical Environmental 1 zone which is defined by Utah County as:

The CE-1 Critical Environmental Zone covers the canyon, mountain, riparian and other areas of environmental concern in Utah County. Land within the zone is native pasture, watershed, and wildlife habitat, and is a pass-through area for roads and utilities. It is also the source of wildfires, flooding, avalanche, and is the water recharge area for the culinary aquifers used by the cities, and is the range essential to wildlife. Maintenance of the scenic quality of the mountain environment is important to promote tourism.

The northern portion of the West Hills WMA are within the Mining and Grazing 1 zone which is defined by Utah County as:

The M&G-1 Mining and Grazing Zone covers the dry mountain and desert areas of the county. Limitations imposed by climate, topography, soil capability, inadequate water supply, and the presence of economically significant mineral deposits has identified this zone as a place for the grazing of livestock on the open range, the mining of earth products, and the location of activities and industrial operations which are not appropriate near urban centers.

The proposed management of the WMAs does not conflict with the zoning ordinances established by Utah County.

Most of the WMAs in this plan occur within Juab County and generally fall into the Grazing, Mining, Recreation, and Forestry District GMRF-1 which limits what types of structures may be built on this type of property.

IV. MANAGEMENT GOALS AND OBJECTIVES

The management of these WMAs will take into account the goals, objectives, and strategies of other Division planning efforts. These other plans are briefly discussed below.

UDWR Strategic Plan

Maintain existing wildlife habitat and increase the quality of critical habitats and watersheds throughout the state.

The management of the WMAs in this plan has relevance to the following goals and objectives outlined in the Division's most current strategic plan:

Resource Goal: Conserve, enhance and actively manage Utah's protected wildlife populations.

- *Objective R1: Increase, decrease or maintain wildlife populations, as needed, to meet the objectives in our management plans.*
- *Objective R2: Maintain existing wildlife habitat and increase the quality of critical habitats and watersheds throughout the state.*
- *Objective R5: Conduct management work to help prevent species of concern from being federally listed as threatened or endangered, and work to delist those species that are currently listed.*
- *Objective R7: Decrease the number of wildlife-related incidents — including property damage, crop depredation and threatened or endangered species listings — that negatively affect private property owners.*

Constituency Goal: Strengthen support for wildlife management by demonstrating the value and importance of wildlife to all Utahans'.

- *Objective C6: Increase hunting and fishing opportunities.*

These goals and objectives will be achieved through a variety of measures specified in the property and habitat management sections of this plan and include development and maintenance activities, habitat improvements, access management and fire management. Current and future partnerships and cooperative efforts will also aid the Division in addressing and reaching these goals and objectives. Examples of this are the Division's participation in local Coordinated Weed Management Area's (CWMA's) and watershed planning committees.

WILDLIFE ACTION PLAN

The 2015-2025 edition of the Utah Wildlife Action Plan (WAP) was created with the express purpose and goal of managing native wildlife species and their habitats to help prevent listings under the Endangered Species Act. To help achieve this goal, the WAP provides a statewide approach for the partnership-based, coordinated planning and implementation of wildlife and habitat conservation practices. The WAP addresses the following elements:

- Conservation targets include: species of greatest conservation need, and those species' key habitats; information about the status and distribution of these species; information about the location and condition of these key habitats.
- Threats and limiting factors facing these species and habitats, and research required to help managers more effectively address these problems. Threats are measured and prioritized on a statewide basis, based on how many targets they impact, and how severely the targets are impacted.
- Conservation actions required to abate the highest-priority threats, and improve the supply of these limiting factors.
- Monitoring the status of these targets, and in particular the effectiveness of these actions.
- Approaches for including the public, partners, and stakeholders, in consideration of the mission and authority of partners.
- Provisions for coordinating the WAP with other natural resource management plans.

WILDLIFE ACTION PLAN KEY HABITATS

The Utah Wildlife Action Plan identifies several key terrestrial habitats that occur on the WMAs in this plan. The WAP includes a statewide threat assessment which identifies threats to each key habitat and then ranks the impact of that threat (scope and severity (S&S) according to the number of species of greatest conservation need that could be affected from that threat. These key habitats and their priority threats include:

- Low Sagebrush: The lower elevations of the WMAs in this plan contain scattered pockets of low sagebrush habitats, specifically Inter-Mountain Basins Big Sagebrush Shrubland.
- Mountain Big Sagebrush: Mountain big sagebrush habitats on the Juab County WMAs are widespread areas and often interspersed with invading juniper and pinyon trees before transitioning into the gambel oak type at high elevations. The dominant type consists of Inter-Mountain Basin Montane Sagebrush Steppe - mountain sagebrush type. These types are key to providing browse forage for wintering big game animals on the WMAs.
 - Priority threats include:
 - Roads - transportation network (medium)
 - Droughts (high)
 - Inappropriate fire frequency and intensity (medium)
 - Problematic plant species native upland (very high)
 - Improper grazing - current (high)
 - Improper grazing - historic (very high)
 - Problematic plant species – non-native (medium)
 - Seeding non-native plants (medium)
 - Utility and service lines (low)
 - OHV motorized recreation impact (low)
- Gambel Oak: Gambel oak type habitats are common on the properties consisting primarily of the Rocky Mountain gambel oak - mixed montane shrubland - patchy and continuous types. There are small areas of the Rocky Mountain gambel oak - mixed montane shrubland - patchy type on the southern portion of the Levan WMA.
 - Priority threats include:

- Invasive Plant Species – Non-native (medium)
 - Inappropriate fire frequency and intensity (high)
- Mountain Shrub: Mountain shrub key habitats on the WMAs in this plan are commonly found on the higher elevations of the Santaquin, Mona Bench, Nephi Canyon and Triangle Ranch WMAs and consist of Inter-Mountain Basins curl-leaf mountain mahogany woodland and Rocky Mountain Bigtooth Maple ravine woodland habitats. This habitat includes some species which resprout after fires, while other species do not resprout.
 - Priority threats include:
 - Invasive Plant Species – Non-native (medium)
 - Seeding non-native plants (medium).
- Aspen Conifer: Aspen conifer key habitats occur in isolated areas on the highest elevations of the Santaquin, Mona Bench and Triangle Ranch WMAs. These habitats consist primarily of Rocky Mountain aspen forest and woodland, and Intermountain basin aspen-mixed conifer forest and woodland - low elevation.
 - Priority threats include:
 - Problematic insects - native (high)
 - Inappropriate fire frequency and intensity (very high)
 - Drought (medium)
 - Problematic animal species - native (medium)
 - Improper grazing (current) (high)
 - Improper grazing (historic) (very high)

The Juab County WMAs HMP process is used to address wildlife species and habitats found on these WMAs by including their needs in management activities. This aligns well with the intent of the WAP, which identifies specific management actions that can be taken to reduce priority threats to these species and habitats.

One of the intentions of the WAP in identifying these habitats is that local-area management efforts can better focus actions on those specific habitats where actions can have the most benefit for species of greatest conservation need. Management of the WMAs attempts to address threats to these habitats to the extent possible, by managing for a diverse range of habitats in various successional stages which maintain and benefit the wide variety of wildlife species found on the property.

UNIT MANAGEMENT PLANS FOR WILDLIFE SPECIES

Most of the WMAs in this HMP lie within the boundaries of wildlife management unit 16, Central Mountains. The West Hills WMA lies to the west of Interstate 15 and is within the wildlife management unit 19C - West Desert, Tintic. Elk and deer management plans were completed for this unit in 2016 and 2015 respectively for WMU 16. The management of the WMA will address the limiting factors and habitat needs identified in those plans and seek to implement habitat management strategies that are needed to reach population objectives. Revisions to these plans are typically done every 5 years, and will be incorporated into the management of the WMA as needed. Current deer and elk management plans can be found on the DWR website at the following web address: <https://wildlife.utah.gov/>. In the search window type in deer and elk plans for wildlife management unit 16.

V. STRATEGIES FOR PROPERTY MANAGEMENT

DEVELOPMENT ACTIVITIES

The Division will maintain existing capital improvements on the WMAs. The WMAs have established boundaries and fences that are maintained regularly. Surveys will be completed where boundary disputes occur and fences will be constructed to establish legal boundaries. Where fences are in disrepair replacement fences will be constructed. Property boundaries are signed and additional signage identifying road closures, rehabilitation areas, etc. will be placed as needed. Perennial water sources are limited. Water development projects that would improve the Division's capacity to adequately administer a grazing program on the WMA should be pursued. Unauthorized roads and trails will be closed and rehabilitated. Authorized roads will be signed and maintained to ensure access and safety to the public.

PROPERTY MANAGEMENT STRATEGIES:

- Establish property boundary
 - Maintain fencing to delineate WMA boundaries,
 - Resolve existing trespass issues, both livestock and human, with neighbors,
 - Install structures and signs to reduce and prevent vehicle trespass and damage to the WMA,
- Signage
 - Establish information kiosks at entry points to the WMAs,
 - Install signs relating to harassment of wildlife,
 - Sign authorized motorized vehicle routes,
 - Sign unauthorized trails/roads and explain closures and rehabilitation efforts,
 - Identify WMA boundaries with fences and/or property boundary signage,
 - Maintain seasonal closure signs,
- Public access
 - Work with agencies and adjacent landowners to prepare access plans or agreements that enhance wildlife habitat, range conditions, escape opportunities for big game, hunting opportunities and that reduce trespass from unauthorized vehicles. Such plans or agreements may emphasize a mix of permanent and seasonal road closures and vehicle type restrictions.

ANNUAL MAINTENANCE ACTIVITIES

Assessments by Division personnel will be made annually, and a maintenance budget will be requested for the following types of activities:

- Inspect boundaries and fences and repair as needed to prevent unauthorized access into additional areas, especially by ATVs,
- Road maintenance/closures: Maintain existing roads and road closures to protect habitat and minimize abuse. Maintain close relationship with adjacent private landowners and Utah & Juab County's on access agreements and issues,
- Parking areas: Monitor and maintain parking areas including gates, signs and fencing to facilitate non-motorized access to the WMA,
- Noxious weed control:
 - Implement an integrated weed management program using herbicide

applications and biological controls. This will include an annual inventory of known infestations, the documentation of new infestations and chemical applications in these areas. Target species include whitetop, thistles and squarrose knapweed. If available, biological controls will be used where appropriate to help control musk thistle.

- Monitor for dyers woad, which is found in the area and may invade the WMAs in the future.
- Work cooperatively with the Utah and Juab County's and Forest Service weed crews to address weed infestations.
- Sign replacement: Annual inspection and replacement of missing or vandalized signs. Maintain main entrance signs to identify ownership; utilize additional signs for WMA restrictions and problems.

VI. STRATEGIES FOR HABITAT MANAGEMENT AND IMPROVEMENT

WILDLIFE MANAGEMENT UNIT PLANS FOR WILDLIFE SPECIES

Strategies for habitat management will be consistent with those outlined in the deer and elk management plans for Wildlife Management Unit 16 Central Mountains, previously mentioned. Strategies consistent with the WMAs in this HMP include:

- Continue to improve, protect, and restore sagebrush steppe habitats critical to deer. Cooperate with federal land management agencies and private landowners in carrying out habitat improvements such as pinyon-juniper removal, reseeding, controlled burns, grazing management, water developments, etc. on public and private lands. Habitat improvement projects will occur on both winter ranges as well as summer range.
- Manage vehicle access on Division of Wildlife Resources land to limit human disturbance during times of high stress, such as winter and fawning.
- Protect deer winter ranges from wildfire by reseeding burned areas, creating fuel breaks and vegetated green strips and reseed areas dominated by cheatgrass with desirable perennial vegetation.
- Reduce expansion of pinyon-juniper and other woodlands into sagebrush habitats and improve habitats dominated by pinyon-juniper woodlands by completing habitat restoration projects like lop & scatter, bullhog or mastication, and chaining.
- Seek opportunities to increase browse in burned areas of critical winter range.

HABITAT STRATEGIES SPECIFIC TO THE JUAB COUNTY WMAS

- Maintain past pinyon-juniper treatments i.e. chaining, mastication and lop & scatter.
- Maintain sagebrush and mountain shrub habitats by treating phase one and two juniper woodlands on WMAs where possible.
- Utilize targeted grazing to improve the health of sagebrush and bitterbrush and as a fuel load reduction strategy to reduce threats of wildlife,
- Increase preferred shrub populations with targeted planting of shrub seed and seedlings.
- Maintain guzzlers and other water sources and continue to look for available water rights to use on these properties in the future.

HABITAT IMPROVEMENT PLAN

Specific, detailed habitat improvement plans are beyond the scope of this HMP. However, when needed and as determined by Division personnel, habitat improvement projects will be submitted to the Division's Habitat Council and other potential partners for funding. Habitat improvement project plans will include specific recommendations including treatment methods, seed mixes and a total acreage targeted for treatment.

IMPROVE BROWSE COMMUNITIES

In order for the WMAs to reach their potential as critical big game winter range, browse communities need to be enhanced and improved. The Division will employ a variety of methods to achieve this including prescribed grazing, prescribed burning, reseeding and seedling transplants, and mechanical treatments. Priority areas will include sagebrush-steppe and mountain browse communities.

LIVESTOCK GRAZING AS A MANAGEMENT TOOL

Grazing will be utilized as a habitat management tool. High intensity, short duration grazing systems during spring and early summer months will be used to improve browse communities for wintering big game.

WATER DEVELOPMENTS

Water developments should only be pursued if they help reach the management objectives of the WMA. Water developments that would result in big game becoming year-round residents on these important winter ranges should be discouraged. Water development projects to help with the grazing management plan should be pursued.

ACCESS MANAGEMENT PLAN

The Access Management Plan for the Juab County WMAs is found in Appendix B.

FIRE MANAGEMENT PLAN

All activities dealing with wild and prescribed fire will be coordinated with the Division of Forestry, Fire and State Lands (DFFSL) according to guidelines established in the Memorandum of Understanding (2005) between DWR and DFFSL. Fire management provisions include:

- When prescribed fire is needed as a habitat management tool, DWR will provide all applicable information to DFFSL to ensure burn plans are complete and submitted by deadlines.
- Wildfires will be aggressively battled at lower elevations in sagebrush habitats to protect the browse communities on crucial winter ranges.
- As needed, green strips will be seeded to reduce the threat and spread of wildfire.
- Hazardous fuels will be reduced in the form of conifer removal or thinning to prevent catastrophic wildfire.

- Open fires are allowed, but cannot be unattended and adequate provisions must be taken to prevent the spread of fire (R657-28). State, federal or local fire restrictions will apply to the WMA when deemed necessary by fire officials and UDWR.
- The use of fireworks and explosives are prohibited on the WMA (R657-28).

WOOD PRODUCTS

The main wood products on these WMAs are juniper posts and firewood. Any wood product is managed according to Administrative Rule R657-28, Use of Division Lands.

LIVESTOCK GRAZING PLAN

Livestock grazing is managed according to Administrative Rule R657-28, Use of Division Lands. Livestock grazing is used as a management tool to reduce fire danger and release browse species for wintering big game. The WMAs will be evaluated by regional personnel and grazed when habitat conditions indicate the need for herbaceous fuel reduction and/or when shrubs show suppression by perennial grasses.

The West Hills WMA has not been officially grazed due to the narrow nature of the property and lack of fencing. Some grazing occurs by neighboring landowners. The Nephi canyon WMA is also not grazed due to lack of fencing and scattered property ownership.

Only the southwestern portion of the Santaquin WMA is grazed. Shrubs on this part of the property are sparse due to the past agricultural practices and wildfire history.

The Mona Bench WMA is grazed by the neighboring landowner's cattle. While a portion of the Triangle Ranch WMA is grazed occasionally by the private landowner to the south in exchange for sportsman access to the WMA.

The Levan WMA is grazed by cattle on most years to improve shrub populations and encourage shrub recruitment. The Deep Creek WMA is grazed occasionally. It has been grazed by sheep and cattle in the past, prior to the 2014 Levan fire that burned the northern two thirds of the WMA. After the burn and seeding of the burn scar, the property is only grazed every few years.

Area	AUMs	Grazing Period
Santaquin	150	May 15 - June 30
Mona Bench	150	May 15 - July 15
Triangle Ranch	100	Occasionally 5/15 - 6/30
Levan	100	May 15 - June 30
Deep Creek	100	Occasionally 5/15 - 6/30

Stocking rates and season of use will be adjusted as needed to obtain desired habitat conditions. Grazing will typically be administered through a high intensity/short duration strategy. Division personnel reserve the right to make changes to stocking rates, season of use and the grazing schedule as needed. The Division also reserves the right to prescription graze the WMAs if needed to reach habitat objectives. Prescribed grazing may result in permits being

issued to a grazer outside of the competitive bid process in order to find willing parties that are able to follow a prescribed grazing plan.

LIVESTOCK TRESPASS

At times, trespass livestock are found on the WMAs due to poor boundary fences and/or gates being left open by WMA visitors. Occurrences of trespass livestock will be handled by Division personnel according to the guidelines outlined in the Division's Land Use, R657-28-10.

VII. SUMMARY STATEMENT OF PROPOSED USES

The primary goals and objectives of the Juab County WMAs presented in this HMP are to preserve, enhance and protect big game winter range and wintering wildlife and reduce deer and elk depredation on surrounding private lands. The Division will allow for and provide wildlife-related recreational activities that are consistent with the goals and purposes for which this WMA was acquired.

VIII. MONITORING AND EVALUATION

Regional habitat section personnel, the area wildlife biologist and the district conservation officer will be responsible for monitoring overall effectiveness of the program. Appropriate sections will provide expertise as required. The lead and assistant habitat maintenance specialists will monitor the needs and effectiveness of physical facilities and improvements. Range Trend program personnel will continue to monitor the existing trend studies on a 5-year rotation and will add additional monitoring sites as needed. The regional habitat section will amend this habitat management plan as needed.

IX. Appendices

- Appendix A - Maps
 - A1 - General location and land ownership
 - A2 – Santaquin WMA
 - A3 – West Hills WMA
 - A4 – Mona Bench WMA
 - A5 – Nephi Canyon WMA
 - A6 – Triangle Ranch WMA
 - A7 – Levan WMA
 - A8 – Deep Creek WMA
 - A9 – 2018 Fire Map

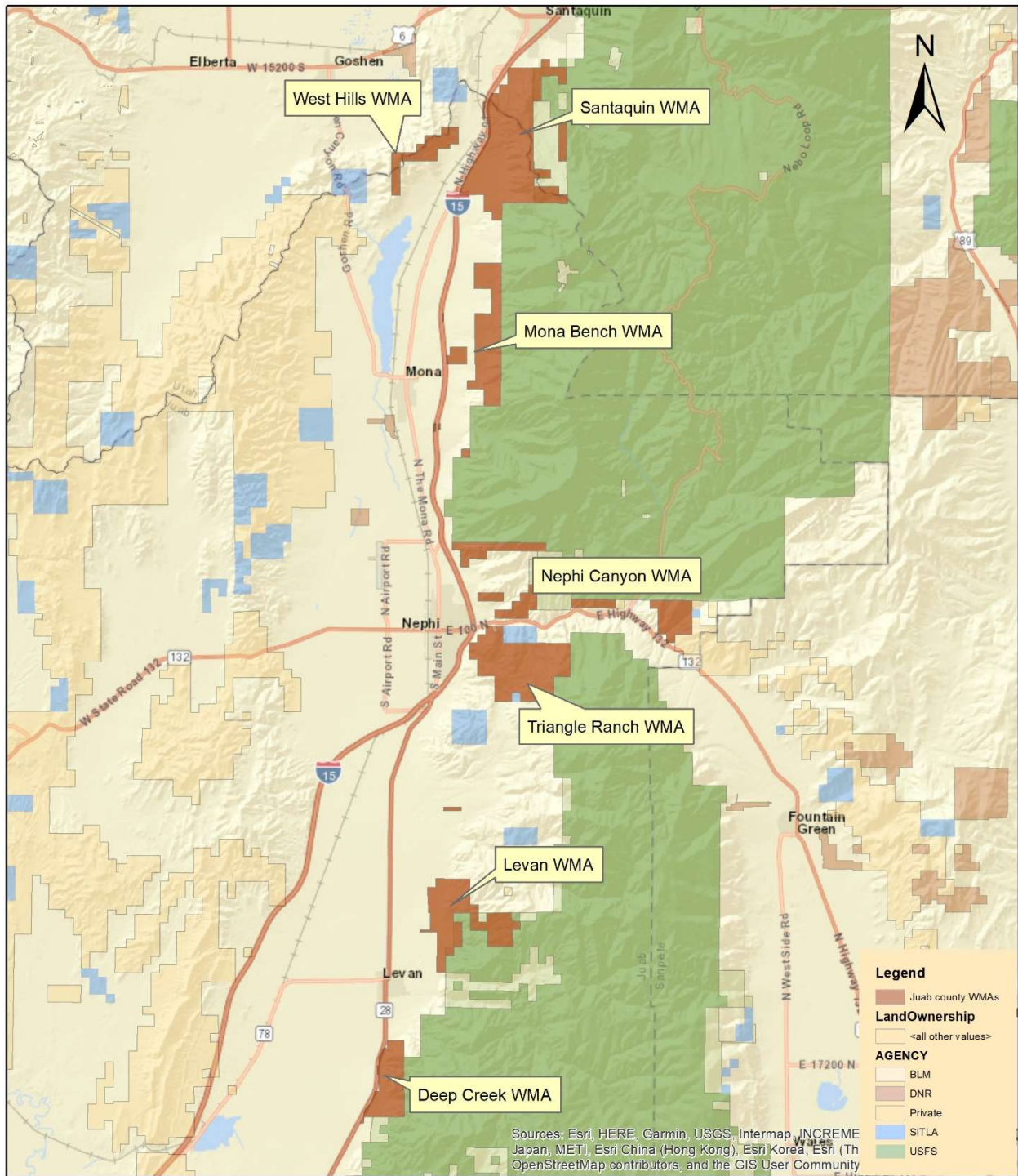
- Appendix B - Access Management Plan and Access Maps of WMAs
 - B1 – Santaquin WMA access map
 - B2 – Santaquin WMA shooting closure map
 - B3 – West Hills WMA access map
 - B4 – Mona Bench WMA access map
 - B5 – Nephi Canyon WMA access map
 - B6 – Triangle Ranch WMA access map
 - B7 – Levan WMA access map
 - B8 – Deep Creek WMA

- Appendix C – WMA parcel information

Appendix A – Maps

Map A-1

Juab County Big Game Winter Range WMAs

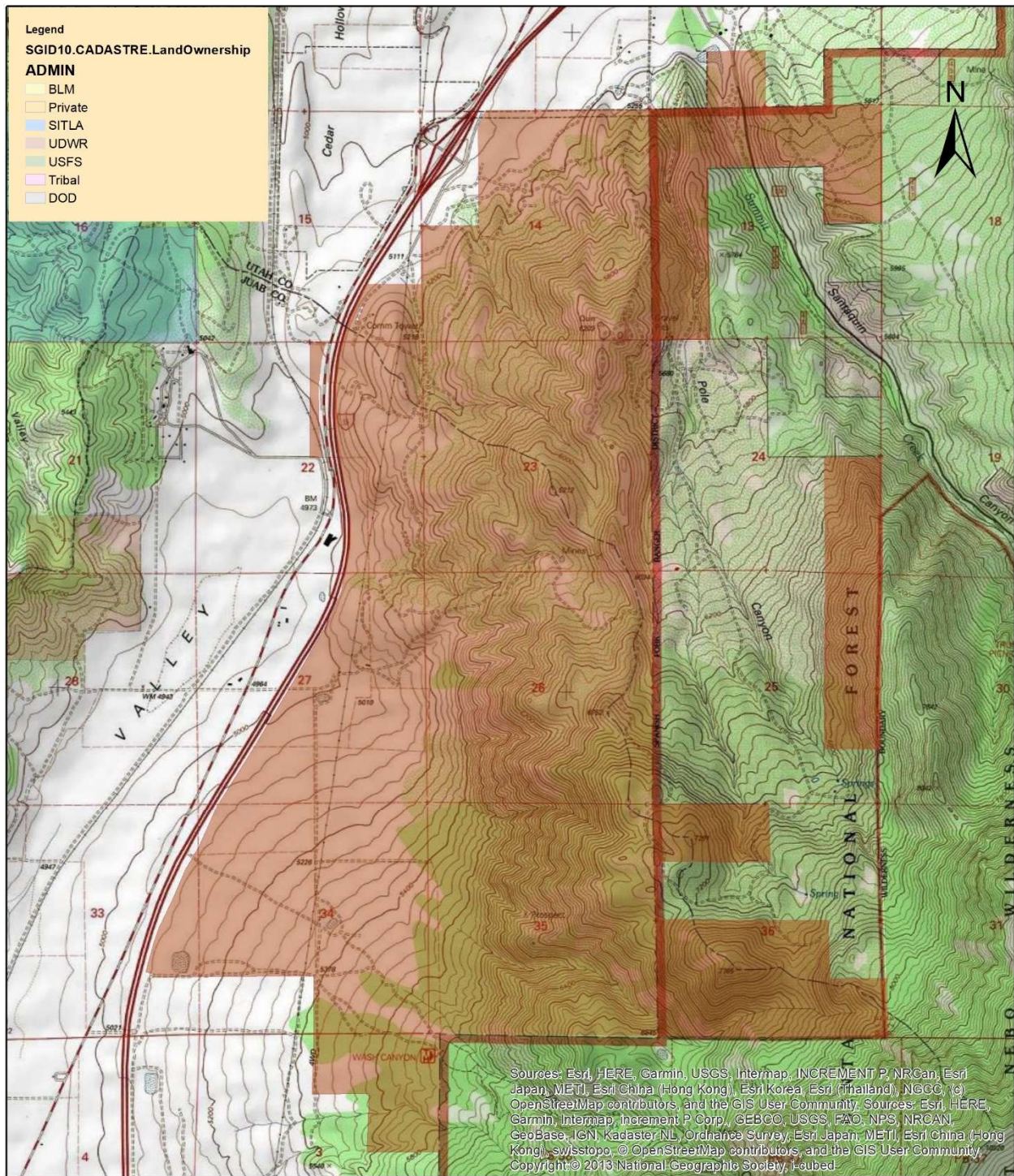


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Map A-2

Santaquin WMA



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community. Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community. Copyright © 2013 National Geographic Society, i-cubed.

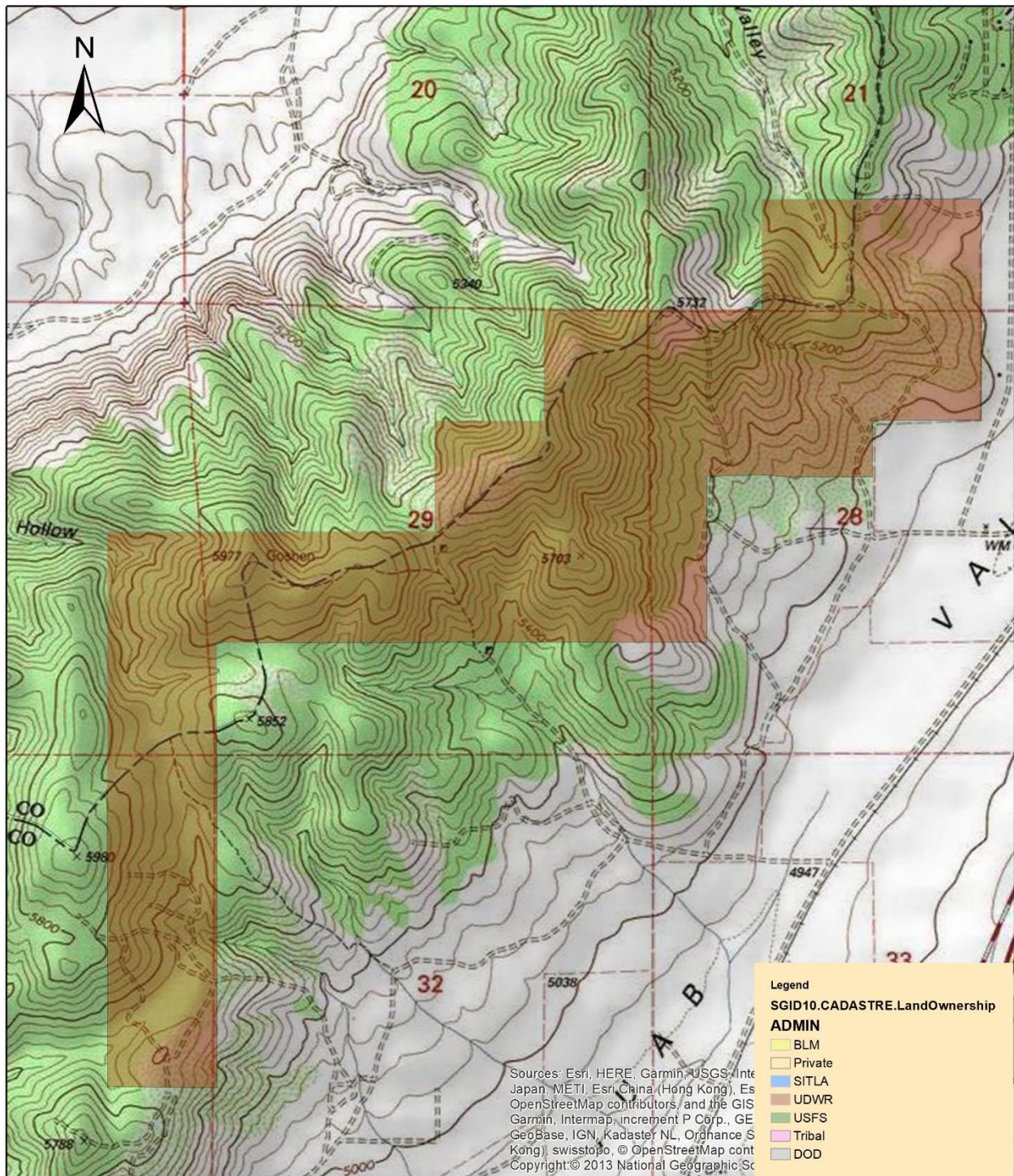


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Map A-3

West Hills WMA

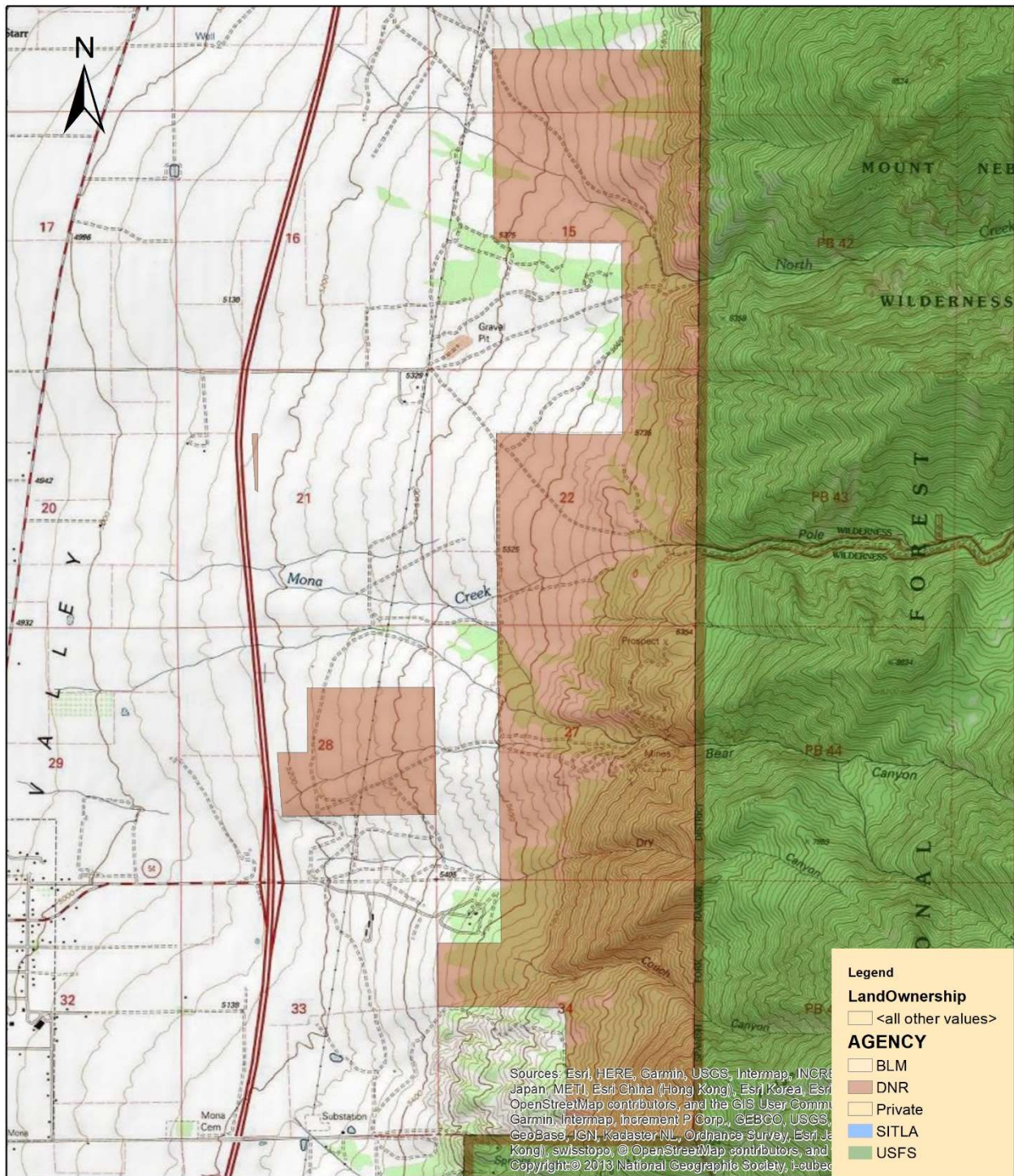


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Map A-4

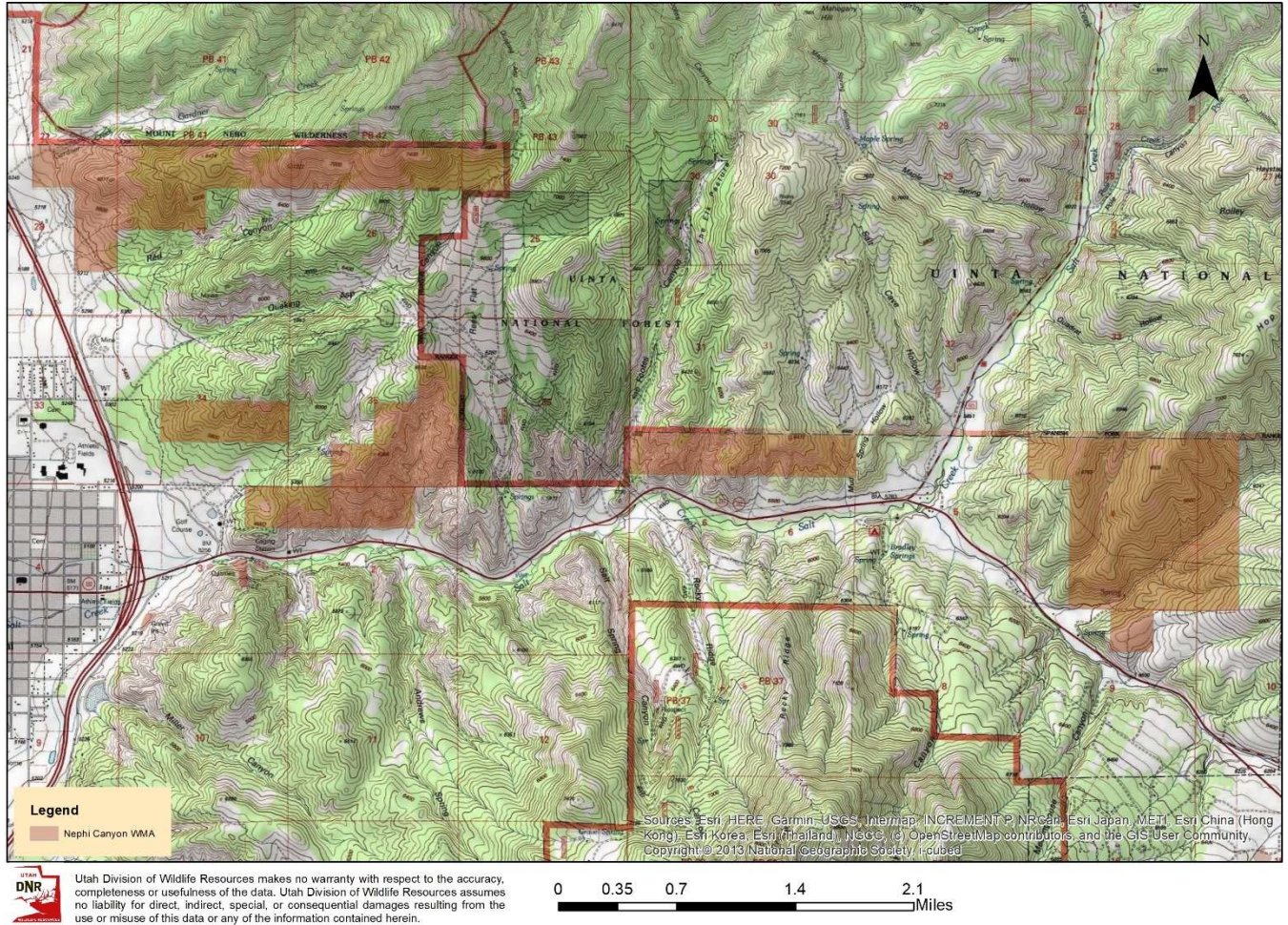
Mona Bench WMA



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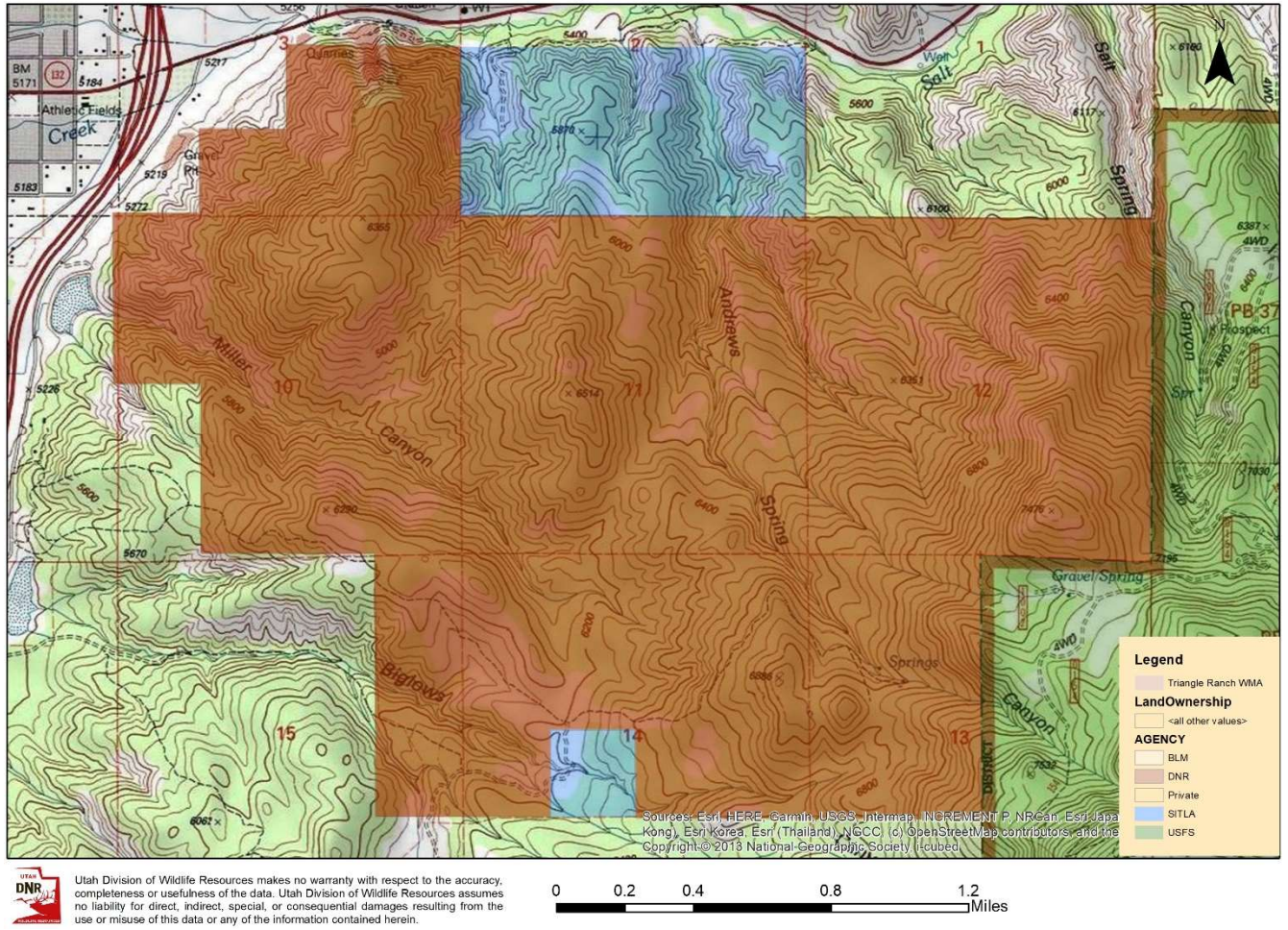


Map A5 - Nephi Canyon WMA



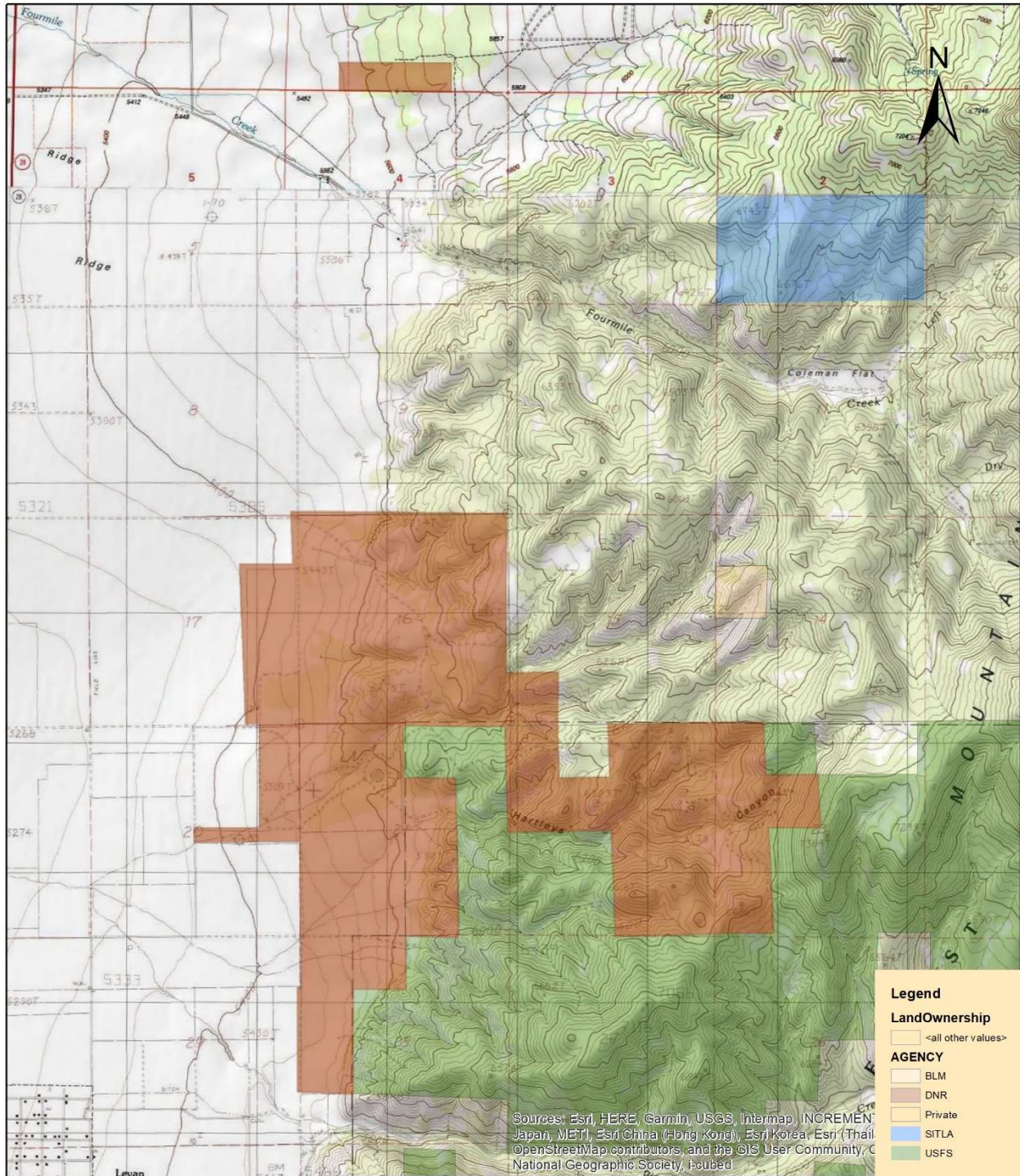
Map A-6

A-6 Triangle Ranch WMA



Map A-7

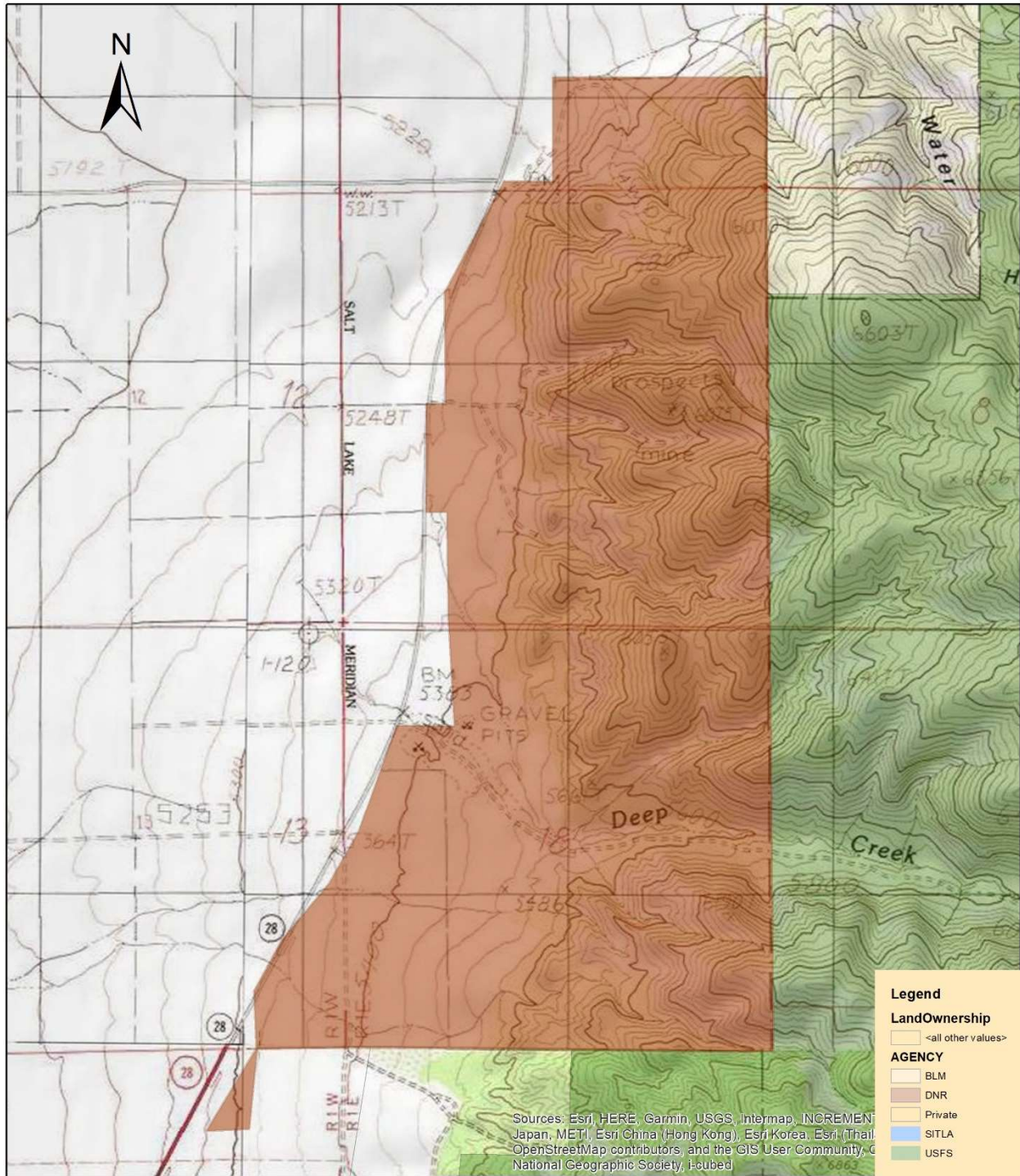
A-7 Levan WMA



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A-8 Deep Creek WMA



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Appendix B – Access Management Plan

ACCESS MANAGEMENT PLAN – JUAB COUNTY WMAS

PURPOSE

The WMAs contained in this plan were acquired to preserve and protect big game winter range and wintering animals. These lands provide crucial winter and spring habitat for big game in this area. The access management plan will ensure that public access and use of the WMA is done in a manner that assists the Division in achieving the goals and objectives outlined in the habitat management plan.

BACKGROUND

In addition to providing crucial habitat for wintering big game, the Division recognizes the importance of these lands as popular hunting, trapping, and outdoor recreation areas for local residents in Utah and Juab Counties as well as sportsmen statewide. As such, the Division solicited comments for the purpose of including key stakeholder and constituent interests in determining how access should be managed on the WMAs. Some of the WMAs in this plan did not have a winter closure in place in the past. A winter closure for motorized vehicles during the traditional winter period of December 1st through April 30th will be implemented where feasible. Additional seasonal restrictions will be used to address rising public and OHV use as needed.

ROAD DESIGNATION

Roads are typically categorized as one of three types: Open year round, seasonally closed, or permanently closed. Some roads on these WMAs have an additional designation of administrative access only.

OPEN ROADS

These are roads that are open year round due to agreements and/or established rights-of-ways with counties, other agencies, and private landowners with in-holdings to a Division property. Roads that do not occur within crucial habitat and/or do not result in habitat damage may also be left open year round.

SEASONALLY CLOSED ROADS

These are roads that are closed for a portion of the year and are not on established rights-of-way or under an agreement with another entity to be left open year round. Roads that fall within this category are closed to motorized vehicles generally during the winter and early spring. The purpose of seasonally closed roads is to limit disturbance to wintering wildlife, protect sensitive and crucial habitats and to prevent excessive road damage during wet winter and spring months.

ADMINISTRATIVE ACCESS ONLY

These roads are not for public use but were created to access power lines, power poles and other types of infrastructure.

PERMANENTLY CLOSED ROADS

These are roads that serve no useful purpose for management or recreational use and that fragment and damage crucial habitats. User-created roads and trails not authorized by the Division also fit into this category. These roads will be closed using signs, berms, fencing or other means. Where needed, roads may be ripped and seeded. Others will be closed and allowed to return to their natural state.

As needed, seasonal and/or permanent road and trail closures are done under the authority of Administrative Rule R657-28, Use of Division Lands.

GENERAL ACCESS PROVISIONS

Motorized access is restricted to existing roads and trails as authorized by the Division. All authorized roads and trails, including their designation, are shown on the WMA access maps at the end of this plan. Roads and trails not shown on WMA access maps are considered unauthorized. The Division reserves the right to close all unauthorized roads and trails. Authorized travel routes will be signed as open making them easy to distinguish.

Motorized vehicles, including OHV's, are restricted to existing and designated roads (Utah Code Section 41-22-10.1) and this policy will be enforced. Harassment of wildlife or damage to the environment, including abuse of lands, watershed, or impairment of plant or animal life while operating an OHV is illegal (Utah Code Section 41-22-13), and this policy will be enforced. The creation of new roads or trails by unauthorized motorized and non-motorized traffic is prohibited.

The Division cautions against motorized travel on the WMA during extended periods of wet weather. Under these conditions, roads become slick and difficult to navigate and are also easily degraded resulting in permanent damage.

ENFORCEMENT OF ACCESS MANAGEMENT PLAN

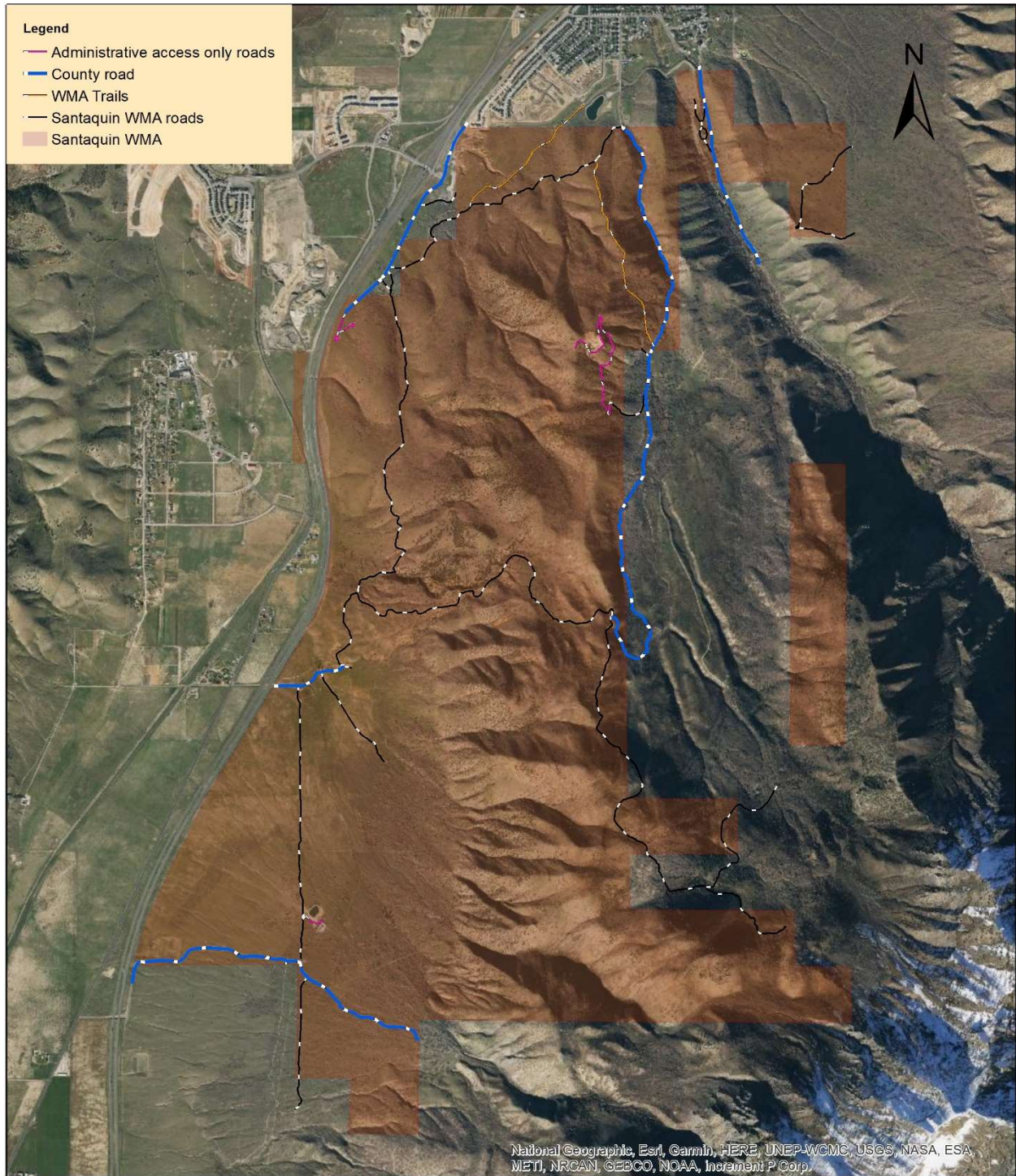
Enforcement of the access management plan will be carried out by Division personnel. However, due to the high amount of public use on the WMAs, the Division will work closely with the county sheriff's office and other local law enforcement agencies to keep motorized vehicle travel on authorized travel routes.

Division personnel will inform the public of the access plan by adequately signing access points, roads and trails, parking areas, and fence lines. In addition, media coverage may be used to disseminate information regarding the access plan and how it relates to the overall goals and objectives of the WMA contained in this plan. Seasonal closures or other issues relating to access will also be included in hunting proclamations published annually by the Division.

The Division will work with local municipalities, the county, and other state and federal Agencies to coordinate access and travel plans that are consistent with other planning efforts.

Map B-1

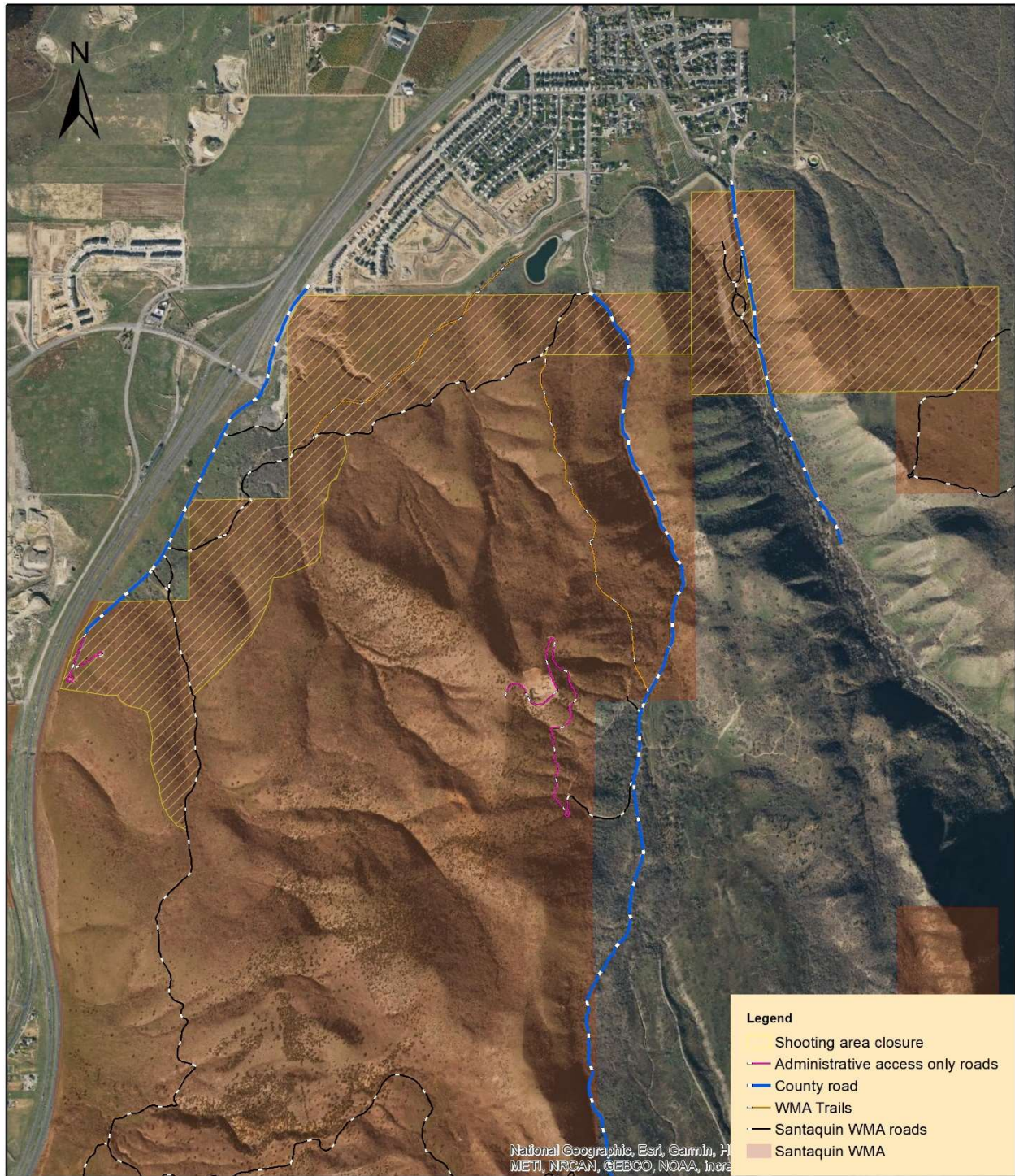
Santaquin WMA



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Santaquin WMA - North Shooting Closure Map

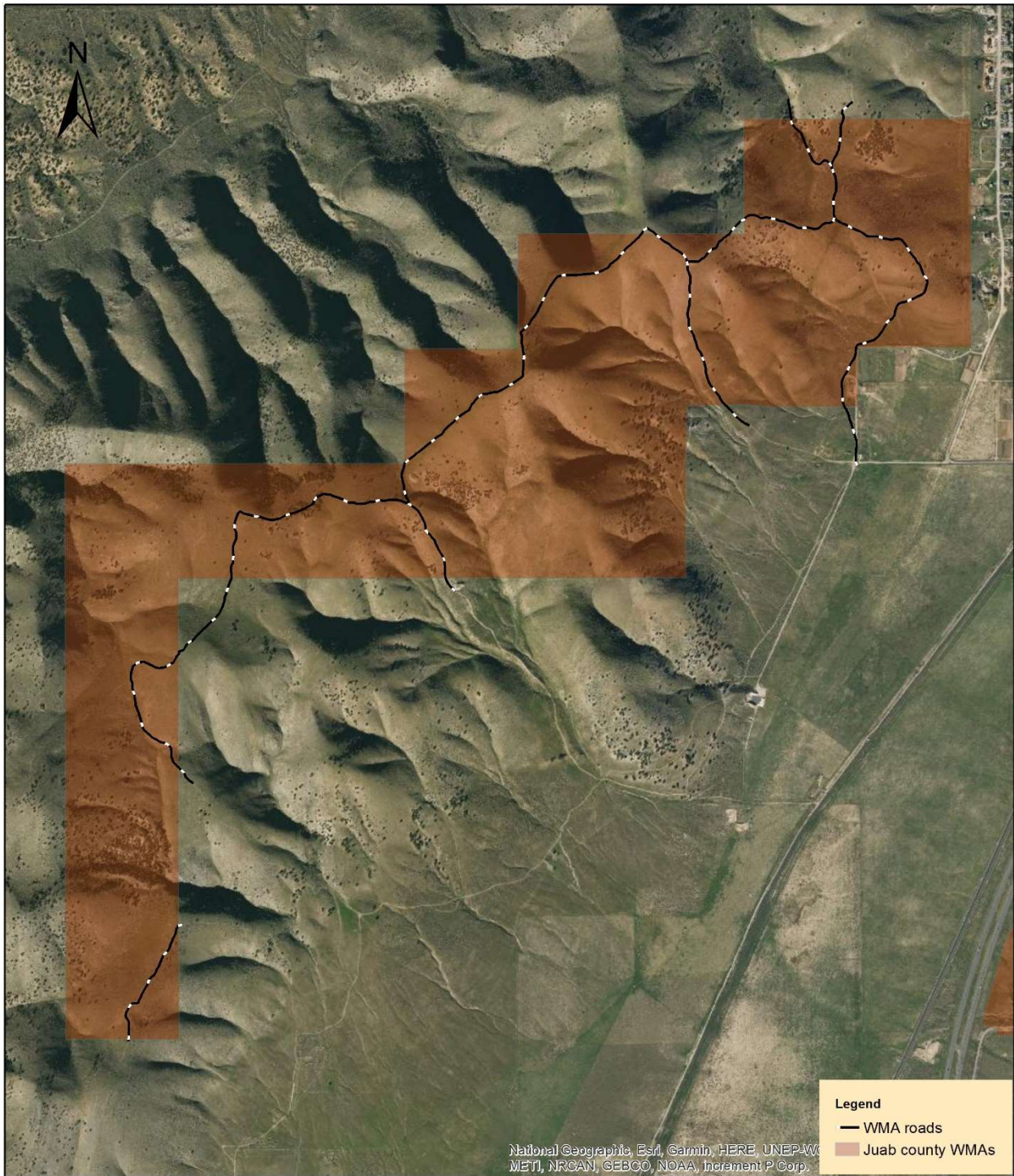


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Map B-3

West Hills WMA

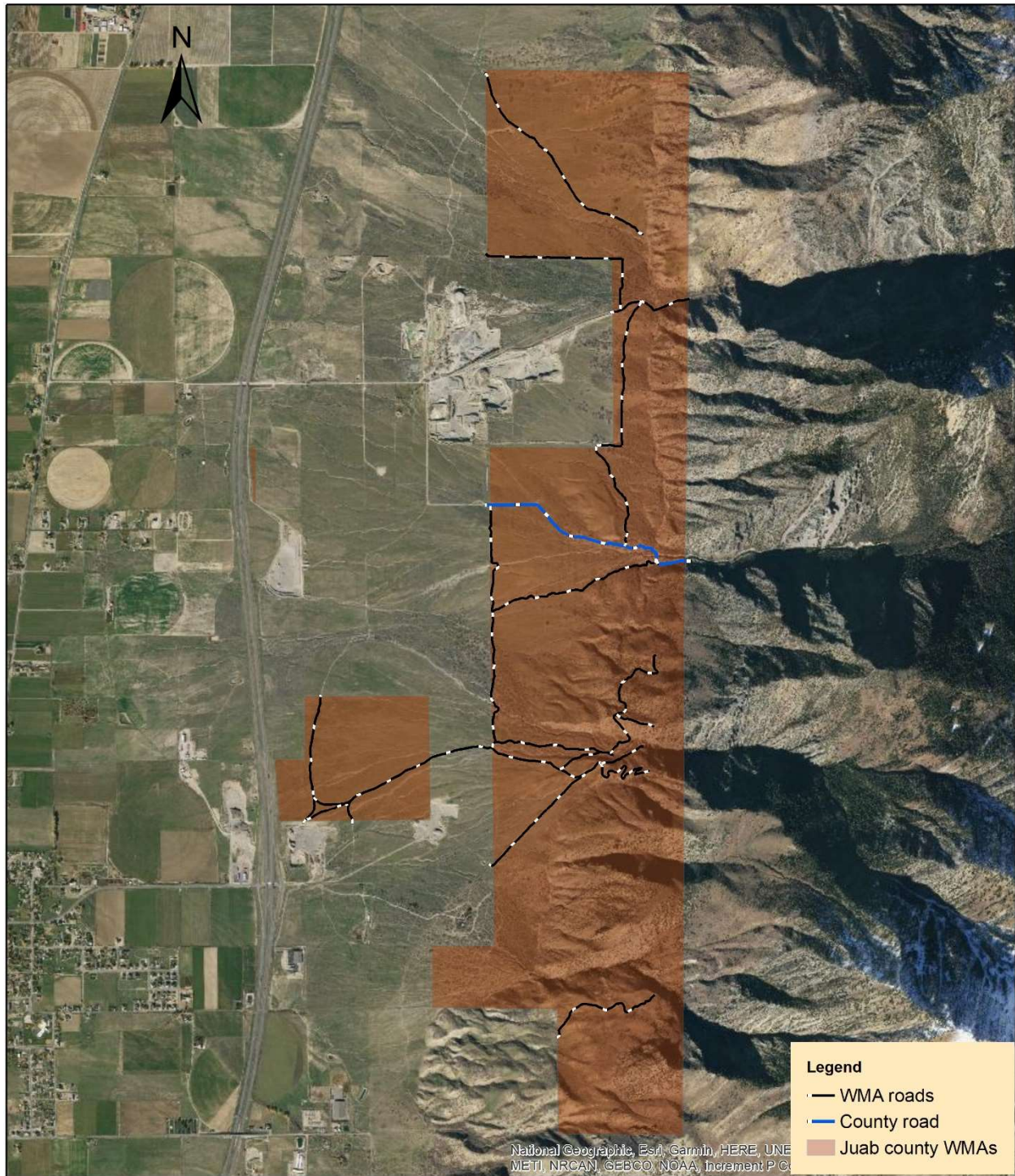


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Map B-4

Mona Bench WMA

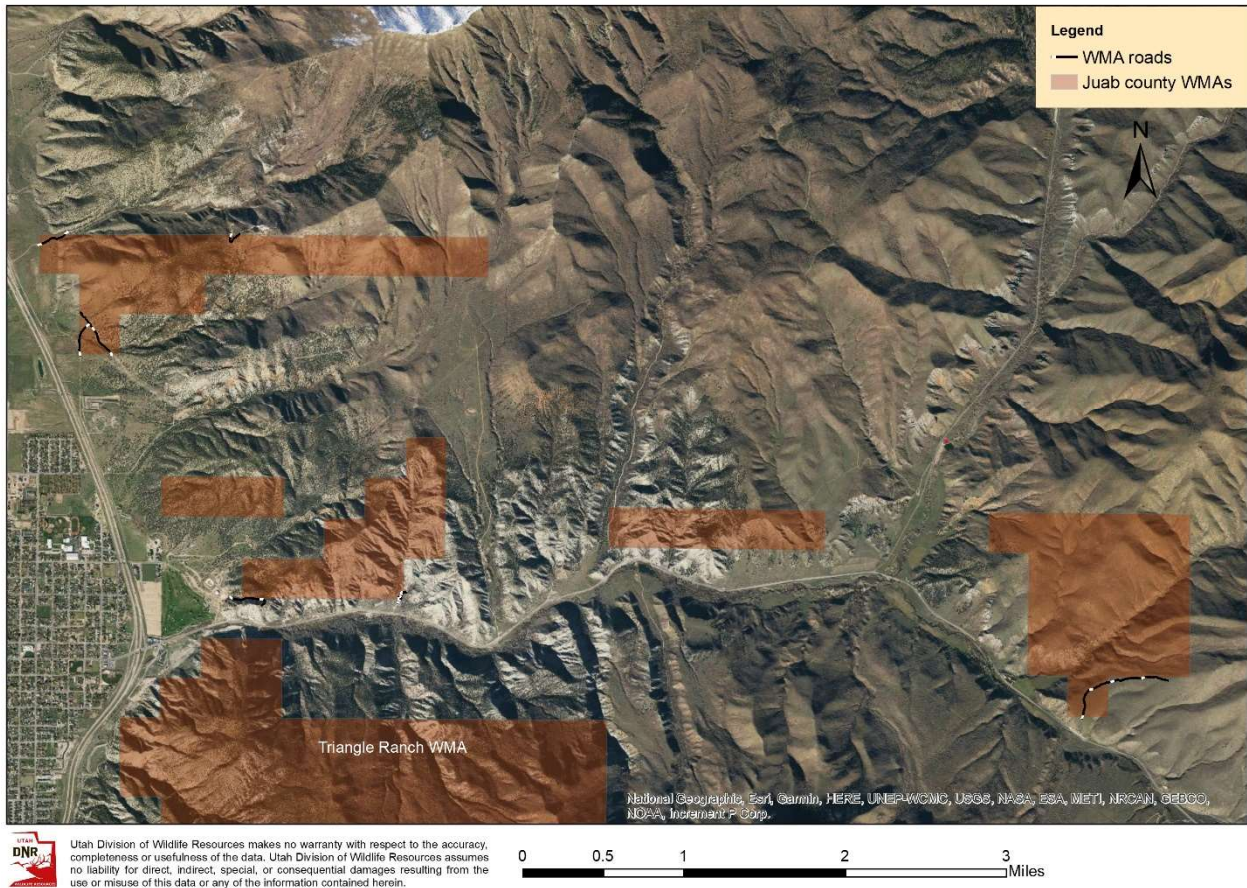


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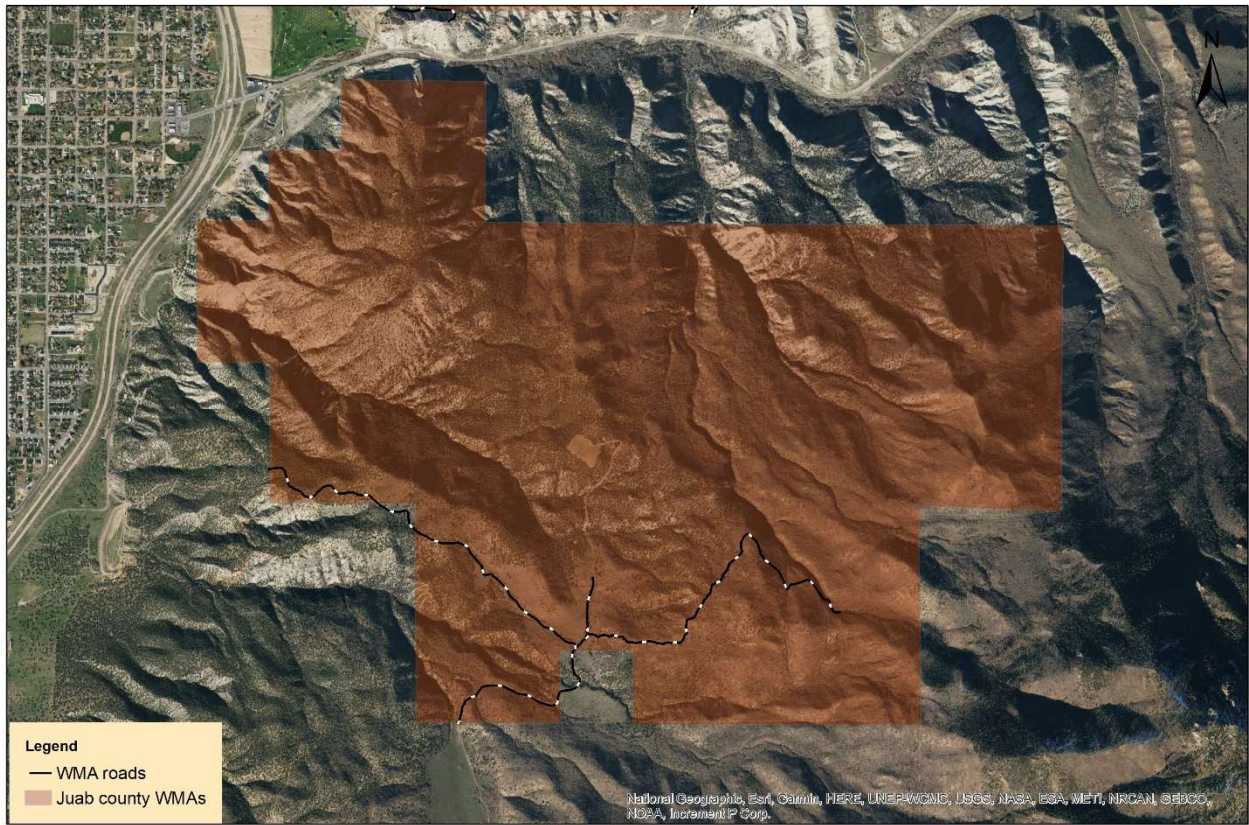
Map B-5

Nephi Canyon WMA



Map B-6

Triangle Ranch WMA



Legend
— WMA roads
■ Juab county WMAs

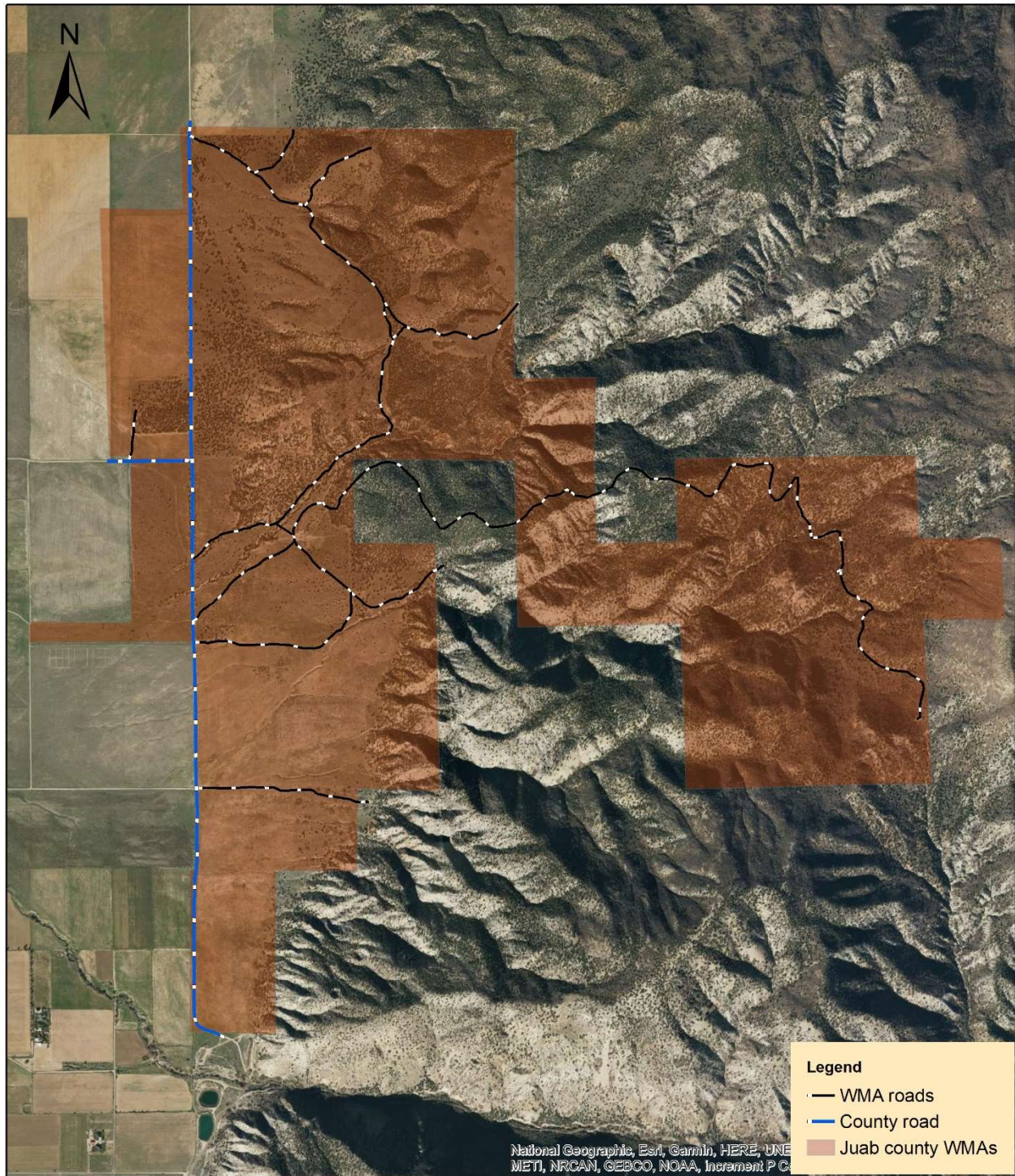
National Geographic, Esri, Garmin, HERE, UNEP/AONAS, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp.



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0 0.25 0.5 1 1.5 Miles

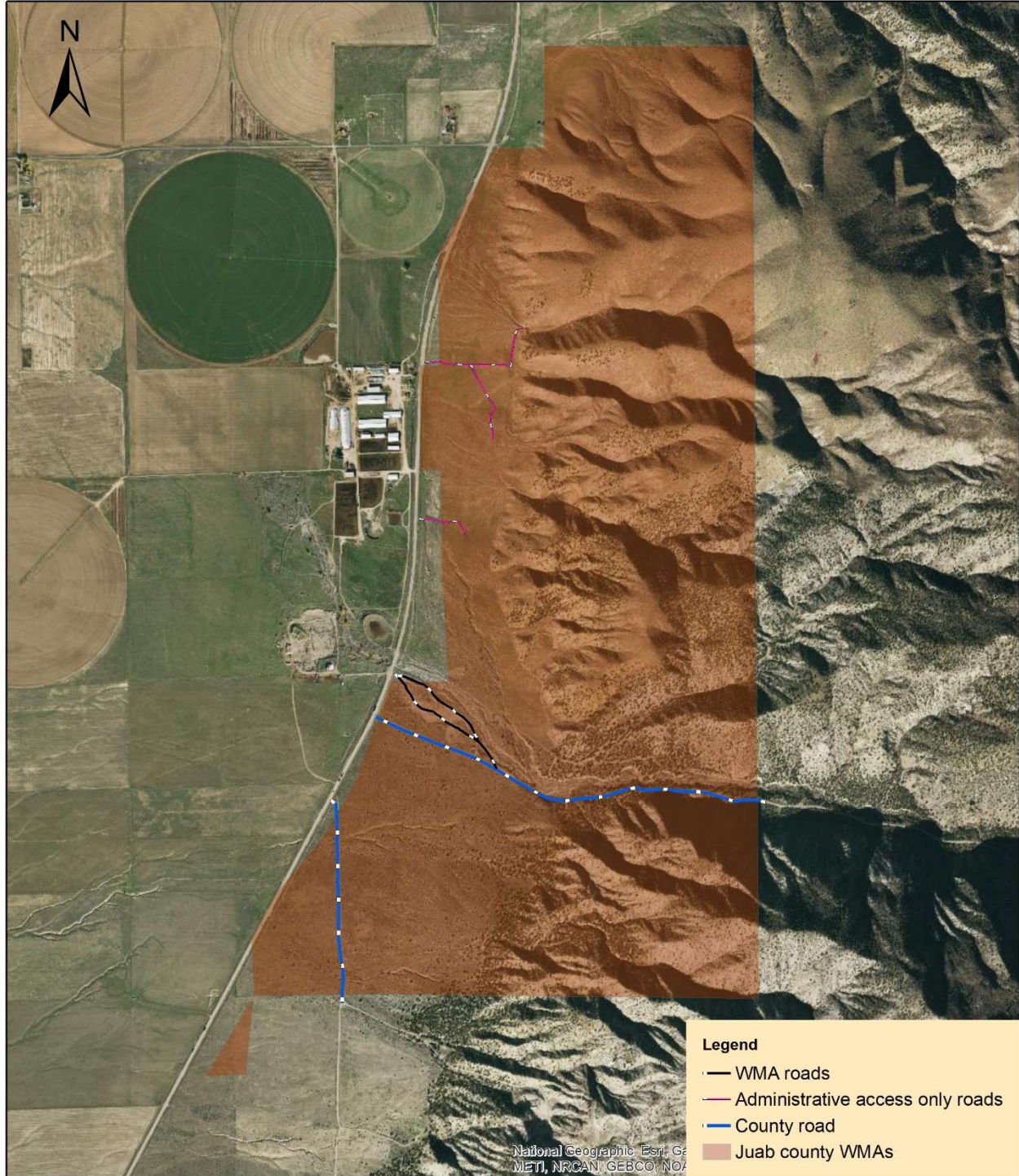
Levan WMA



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Deep Creek WMA



Appendix C – Parcel Acquisition History

Juab County WMAs HMP Acquisitions	Location T. R. & Sec, Salt Lake Meridian	Description	Acres	Encumbrances
Levan WMA				
Nephi land and livestock - 1959	T13S, R1E Section 33	SW 1/4 or SW 1/4	49.9	
Lorinzo and Eva Mangelson -1946	T14 S, R1E Section 21	W1/2 of NE1/4 and W1/2 of SW1/4	200	
Charles and Emma Mangelson - 1946	T14S, R4E, Section 28	NE1/4 of NW1/4, W 1/2 of NW 1/4, NW1/4 of SW1/4, E 1/2 of SW 1/4 of SW1/4	180	
Angus and Ada Ingram - 1979	T14S, R1E, Section 17	SE 1/4 of NE 1/4 and E 1/2 of SE 1/4	120	Mineral, geothermal, oil and natural gas rights reserved but not sand and gravel. Retains the rights to lease, egress or ingress for the exploration, development, removal of same
	Section 20	NE 1/4 of NE 1/4, SE 1/4 of NE 1/4, SE 1/4 of NE 1/4	80	
	Section 21	NW 1/4 and SW 1/4 of NE 1/4	200	
	Section 15	SW 1/4 of SW 1/4	40	
	Section 22	W 1/2 of NW 1/4, SE 1/4 of NW 1/4 and E 1/2	440	
Farrel and Deanna Wankier - 1974	T14S, R1E Section 21	SE 1/4 of SW 1/4		All minerals and coal
State of Utah - 1978	T14S, R1E Section 16	All of section 16		ROW for roads, ditches, canals, or transmission lines now existing over, under or across said property
Juab County WMAs HMP Acquisitions				
Deep Creek WMA				
Ferrell Wankier SR - 1974				
Ferrell Wankier SR - 1977	T15S, R1W Section 13	SE 1/4 of SE 1/4 minus 4.36 acres for State Highway	35.6	All mineral, oil and gas (but not including sand and gravel)
	T15S, R1E Section 6	S 1/2 of SE 1/4	80	
	Section 7	E 1/2, E 1/2 of SW 1/4, SE 1/4 of NW 1/4	440	
	Section 18	E 3/4 of sec, all of lots 2, 3, and 4 minus 4.47 acres in lots for State Highway	585	
Ferrell Wankier JR - 1978	T15S, R1W section 13	S1/2 of NE 1/4 of SE 1/4 and east of highway 28, N 1/2 of NE 1/4 of SE 1/4 and east of highway 28	8.8	All mineral and oil rights
Lois Brough, Golden and Romaine Mangelson - 1978	T15S, R1E Section 7	NE corner of NW 1/4 of SW 1/4	7	All mineral and oil rights
Farrell Wankler Jr. - 1988	T15S, R1W section 13	SW 1/4 of SE 1/4 east of highway 28	7.55	All minerals and mineral rights except sand and gravel
	Section 24	NW 1/4 of NE 1/4 east of highway 28		

Juab County WMAs HMP Acquisitions	Location T. R. & Sec, Salt Lake Meridian	Description	Aces	Encumbrances
Mona Bench WMA				
USA - 1971 and 1972	T11S, R1E Section 10	Lots 7, 8 and 9 (S 1/2 of SE 1/4, SE 1/4 of SW 1/4)	631.3	ROW for ditches and canals. All mineral rights
	Section 15	Lots 1, 2, 3 and 4 (W 1/2 of NE 1/4, E 1/2 of NW 1/4)		
	Section 22	Lots 1, 2, and 3, SW 1/4 of NE 1/4, SE 1/4 of NW 1/4, NE 1/4 of SW 1/4, NW 1/4 of SE 1/4,		
USA - 1973	T11S, R1E Section 22	Lot 4, SE 1/4 of SW 1/4, SW 1/4 of SE 1/4	625.2	
	Section 27	Lots 1, 2, 3, and 4, W 1/2 of 2 1/2, E 1/2 of NW 1/4		
	Section 34	Lots 1 and 2		
James and Zoma Painter - 1972	T12S, R 1E Section 4	Isolated parcel in NW 1/4 of SW 1/4	5.55	
Fred and Viola Lynn - 1972	T11S, R1E Section 21	Isolated parcel in SE 1/4 of NW 1/4	2.26	
USA - 1975	T12S, R 1E Section 9	Lot 2 isolated parcel (SE 1/4 of NE 1/4)	40	
BLM- 1976	T11S, R1E Section 28	S 1/2 of NE 1/4, N 1/2 of SE 1/4	160	ROW for ditches and canals. All mineral rights
Hernam and Alice Young - 1976	T11S, R1E Section 27	E 1/2 pf SW 1/4	80	All mineral, oil and gas (bu not including sand and gravel)
Clark Molyneux and Janice Pritchett - 1976	T11S, R1E Section 34	SW 1/4 of NW 1/4	40	All mineral, oil and gas (bu not including sand and gravel)
Salt Lake County - 1976	T12S, R1E Section 4 & 5	Isolated parcel NW 1/4 of SW 1/4, NE 1/4 of SE 1/4	6.73	
Juab County WMAs HMP Acquisitions				
Nephi Canyon WMA				
BLM- 1975	T12S, R1E Section 26	N 1/2 of NE 1/4, N/4 of NW 1/2	160	ROW for ditches and canals. All mineral rights
	Section 28	Lots 1, 2, and 4, NE 1/4 of SE 1/4	160	
	Section 34	NE 1/4 of SW 1/4, NE 1/2 of SE 1/4	120	
	Section 35	SE 1/4 of NE 1/4, SE 1/4 of SW 1/4, SE 1/4	240	
	T13S, R2E Section 6	lots 1,2,3,4,and 5		
Preston and Helen Jones - 1955	T13S, R1E Section 2	Lots 2, 3, and 4	120	
James and Alvaretta Bean - 1967	T13S, R2E Section 3	Lot 4, SW 1/4 of NW 1/4, W 1/2 of SW 1/4	160	All mineral, oil, coal and gas (but not including sand and gravel)
Hop creek Parcels		Lots 1,2,3,4, NE 1/4, SE 1/4 of NW 1/4, SE 1/4, E 1/2 of SW 1/4	521	
		Section 9	NW 1/4 of NE 1/4	

Juab County WMAs HMP Acquisitions	Location T. R. & Sec, Salt Lake Meridian	Description	Acres	Encumbrances
Santaquin WMA				
J. B. Ranch Inc. - 1970	T10S, R1E Section 15	SE 1/4 of SE 1/4, SE 1/4 of SW 1/4 of SE 1/4	47.5	All mineral, oil, coal and gas (but not including sand and gravel)
	Section 22	E 1/2 of E 1/2, W 1/2 of NE 1/4, W 1/2 of SE 1/4, E 1/2 of SE 1/4 of SW 1/4	269.3	
	Section 27	E 1/2 of NE 1/4	80	
	Section 14	S 1/2	320	
	Section 23	All	640.4	
	Section 26	All	640	
	Section 35	All	640	
	Section 36	S 1/2 of S 1/2	160	
	Section 24	E 1/2 of SE 1/4	80	
J. B. Ranch Inc. - 1986	T10S, R1E Section 13	E 1/2 of NE 1/4, NE 1/4 of SE 1/4	120	All mineral, oil, coal and gas (but not including sand and gravel)
	T10S, R1E Section 13	W 1/2 of SE 1/4, SW 1/4 of NW 1/4	120	
	Section 36	N 1/2 of NW 1/4, NW 1/4 of SW 1/4, NW 1/4 of SE 1/4, NE 1/4 of SW 1/4	125	
	Section 14	NW 1/4 of NW 1/4 E 1/2 of NE 1/4	120	
Joseph and Dorothy Ambrose - 1972	T10S R1E Section 33	NE 1/4 of SE 1/4,	32	
Utah Power and Light - 1972	T10S, R1E Section 12	SE 1/4, or SW 1/4 and lots 1,2 and 3	121.59	ROW water pipeline, powerlines and water rights
	Section 13	SE 1/4 of the NE 1/4		
Idaho first National Bank - 1985	T10S, R1E Section 14	E 1/2 of NW 1/4, W 1/2 of NE 1/4. minus triangle shaped parcel on NW corner conveyed to road department	160	All mineral, oil, coal and gas (but not including sand and gravel)
Nature Conservancy - 1985	T10S, R1E Section 27	S 1/2 of SW 1/4, SW 1/4 of SE 1/4, SW 1/4 of SE 1/4 of SE 1/4, W 1/2 of SE 1/4 of SE 1/4 of SE 1/4. W 1/2 of NE 1/4 east of I-15, SE 1/4	220	All mineral, oil, coal and gas (but not including sand and gravel). All water rights.
	Section 34	SE 1/4, S 1/2 of SE 1/4 of NE 1/4, E 1/2 of NE 1/4 of SE 1/4 of NE 1/4, N 1/2 of SW 1/4, NW 1/4 east of I-15, N 1/2 of NE 1/4, SW 1/4 of NE 1/4, W 1/2 of NE 1/4	400	
	Section 33	SE 1/4 of NE 1/4 east of I-15, NE 1/4 of NE 1/4 east of I-15	22	
Frank and Lilly Crook - 1987	T10S R 1 E Section 27	N 1/2 of SW 1/4 east of I-15	30	All mineral, oil, coal and gas (but not including sand and gravel)
Nature Conservancy - 1989	T10S, R1E Section 34	SE 1/4, S 1/2 of SE 1/4 of NE 1/4, E 1/2 of NE 1/4 of SE 1/4 of NE 1/4	200	All mineral, oil, coal and gas (but not including sand and gravel). All water rights
Juab County WMAs HMP Acquisitions				
Triangle Ranch WMA				
Triangle Ranch Inc - 1968	T13S, R1E Section 3	SE 1/4 of SW 1/4, N 1/2 of SE 1/4 Lots 6 and 7, S 1/2 of SE 1/4	200	All mineral, oil, coal and gas (but not including sand and gravel)
	Section 10	N 1/2, SE 1/4, E 1/2 of SW 1/4	560	
	Section 11	All	640	
	Section 12	All	640	
	Section 13	N 1/2 of SW 1/4, NW 1/4	240	
	Section 14	N 1/2, N 1/2 of SE 1/4, NW 1/4 of SW 1/4	440	
BLM - 1976	T13S, R1E Section 3	E 1/2 of NE 1/4, NE 1/4 of SE 1/4 lot 1A	120	ROW for ditches and canals. All mineral rights

Juab County WMAs HMP Acquisitions	Location T. R. & Sec, Salt Lake Meridian	Description	Acres	Encumbrances
West Hills WMA				
Nature Conservancy - 1985	T10S, R1E Section 21	SE 1/4 of SW 1/4, SW 1/4 of SE 1/4	80	All mineral, oil, coal and gas (but not including sand and gravel)
	Section 28	W 1/2 of NW 1/4 of SW 1/4, SW 1/4 of SW 1/4 of NW 1/4, N 1/2 of SW 1/4 of NW 1/4, W 1/2 of NW 1/4 of SE 1/4 of NW 1/4	135	
	Section 29	N 1/2 of SW 1/4, N 1/2 of SE 1/4, S 1/2 of NE 1/4, NE 1/4 of NE 1/4	280	
	Section 30	E 1/2 of SE 1/4	80	
	Section 31	NE 1/4 of SE 1/4, E 1/2 of NE 1/4	120	