

Parowan Front

WILDLIFE MANAGEMENT AREA



HABITAT MANAGEMENT PLAN

March 2023

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Habitat Management Plan for Parowan Front Wildlife Management Area

Executive Summary – March 2023

PRIMARY PURPOSE OF PAROWAN FRONT WMA

The Parowan Front WMA is used primarily to protect and enhance mule deer winter range, while also providing habitat for other big game, upland game and non-game species. In addition, many other types of terrestrial and aquatic wildlife, along with their habitats, will similarly receive protection and enhancement. Recreation uses that are allowed include hunting, wildlife viewing, hiking, and horseback riding. Dispersed camping is allowed but not promoted.

WILDLIFE SPECIES

The Parowan Front WMA provides habitat for mule deer, elk, upland game, and a host of non-game species. Golden and bald eagles can be spotted throughout the year foraging across the WMA.

Mammalian species that use the WMA include mule deer, elk, jackrabbits, and cottontail rabbits. Mule deer and elk use the property year-round with seasonal increases in fall and winter.

Common avian species that can be found on the WMA include wild turkeys, mourning doves, and pinyon jays. The WMA provides year-round habitat for many non-migratory species and habitat for migrating birds.

HABITAT IMPROVEMENT

Vegetation treatments to conserve and enhance sagebrush shrublands will be utilized. Treatments to remove encroaching pinyon and juniper, including the maintenance of previous treatments, will be utilized. Shrub transplanting and/or seeding will take place if necessary to enhance available browse forage. Treatments to enhance riparian and mesic habitats will also be utilized.

ACCESS MANAGEMENT

Motorized access to the WMA is provided through a series of roads. Some of which are seasonally closed. Overland travel is limited to foot and horse traffic. The use of E-bikes is prohibited outside of the identified open and seasonally closed roads. Creation of new roads and trails is prohibited. Roads designated as seasonally closed or closed will be signed. In addition to the identified open and seasonally closed roads, there are several additional administrative roads that serve as access for maintenance and management purposes.

MAINTENANCE ACTIVITIES

Typical annual maintenance actions include weed control, fence maintenance, road maintenance and signage. Fence maintenance will include walking the perimeter and interior fences as well as working with the law enforcement and wildlife sections to identify fencing that is problematic to deer and replacing it with wildlife friendly fencing. Road maintenance and signage will involve working with the law enforcement section to address illegal use of trails and roads on the WMA and keeping signage current and legible throughout the year. Water developments will also be maintained and improved to provide water for wildlife and permitted livestock.

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Habitat Management Plan for Parowan Front Wildlife Management Area

March 2023

I. BACKGROUND INFORMATION

INTRODUCTION

This Habitat Management Plan (HMP) has been developed to guide management on lands owned and managed by the Utah Division of Wildlife Resources (DWR) along the foothills from the town of Paragonah south to Cedar City, in Iron County, Utah. These lands were acquired over a span of years from 1952 to 2013. The Parowan Front WMA is split into five management units including the Paragonah Unit, Maple Spring Unit, Summit North Unit, Summit South Unit, and Elliker Basin Unit.

In September of 2022, an advisory committee was formed to assist the DWR in updating and revising the HMP. The committee was composed of 9 official members representing constituency groups including hunters, the Bureau of Land Management (BLM), adjacent landowners, a livestock permittee, conservation district staff, Iron County staff, and an elected official (see appendix E). In addition, staff from the DWR habitat, wildlife, and law enforcement sections attended the committee meetings to serve as subject matter experts and to help gather the information compiled by the committee.

The committee met two times during the fall of 2022 and winter of 2023 to brainstorm and frame ideas they would like to see addressed by the HMP. These ideas have been incorporated into this HMP where they are applicable.

PURPOSE OF DIVISION OWNERSHIP

The Parowan Front WMA was purchased to protect big game winter range but also provides seasonal and year-round habitat for upland game, turkey and other game and non-game species. In addition, the WMA provides access for hunters to enjoy these resources. The WMA is bordered by federal lands (BLM and US Forest Service) and often serves as an access point for those lands.

HISTORIC USES

All of the Parowan Front WMA was used historically to graze sheep and cattle. Small portions of the Summit North, Summit South, and Elliker Basin Units have been farmed in the past; however, very little evidence of agricultural use remains today.

PUBLIC RECREATION OPPORTUNITIES

PUBLIC ACCESS

The Parowan Front WMA is open to the public year-round with some restrictions related to motor vehicle use. These restrictions include no overland travel, and roads identified as seasonally closed in the access management plan (See appendix A). Parking areas and walk-through gates are provided at several locations that help enforce the seasonal road closures.

CAMPING

Dispersed camping is allowed on the Parowan Front WMA for no greater than 10 days (see R657-28-4). There are no developed campgrounds or pads on the WMA. In the event that camping becomes detrimental to wildlife, DWR will consider action(s) to address the adverse effects.

KEY WILDLIFE SPECIES

While the Parowan Front WMA was originally purchased to protect mule deer winter range, it also provides habitat for many species of game and non-game wildlife. These species include but are not limited to elk, upland game, and songbirds. An undetermined number of amphibian and reptile species also inhabit the WMA.

There are 2 inactive colonies of the federally listed (threatened) Utah prairie dog (UPD) in the Summit North Unit and one in the Summit South Unit of the WMA. The last UPD sighting on the Summit North Unit was in 1997, and one UPD was counted on the South Summit Unit in 2015.

GRAZING

The DWR may use domestic livestock grazing to manage vegetation on Division lands if the Division determines that such grazing is beneficial for the maintenance or improvement of wildlife habitat. Grazing has historically been permitted through a formal grazing permit that

includes both the South and North Summit Units. This permit has historically allowed for 75 Animal Unit Months (AUM) between May 15th and June 20th. This permit is renewed annually, depending on the condition of the habitat for wildlife. The permittee alternates use between the north and south unit annually providing for a rest-rotation system. Additionally, the permittee also helps maintain fencing and the water system at Third Spring.

The Maple Spring Unit is surrounded by BLM land without any exclusionary fencing. Grazing is currently permitted on the BLM land and therefore livestock have used the Maple Spring Unit as well. The updated land use rule R657-28 will allow DWR to pursue formalizing a permit on the Maple Springs Unit, in conjunction with the neighboring BLM land.

The WMA is also eligible for use as a grassbank property and can be made available for grazing as in-kind trade for conservation actions on public or private lands, emergency forage for DWR grazing permittees or any other purpose designated by the DWR.

II. PROPERTY INFORMATION

PROPERTY DESCRIPTION

The Parowan Front WMA is a large complex of individual parcels of land located within Iron County, Utah. The WMA is 7,507 acres, all of which are within the closed drainage of the Little Salt Lake in the Sevier River drainage basin. This WMA was assembled from eleven transactions beginning in 1952, with the most recent occurring in 2013. Transactions included purchases and trades from private, BLM and Utah School and Institutional Trust Lands Administration (SITLA) sources.

The WMA is divided into five management units.

The northernmost unit is the **Paragonah Unit**, which consists of two parcels of land totaling approximately 910 acres, located near the town of Paragonah (see appendix B-2). The Robinson Parcel is closest to Paragonah and is a 121-acre piece approximately a quarter of a mile southeast of the town. It is located in Township 34 south, Range 8 west, section 4. The second parcel is the Red Creek Parcel and is a 790-acre piece located approximately 3.5 miles east of the town of Paragonah. This parcel includes all of section 1 and part of section 12 in Township 34 south, Range 8 west.

The **Maple Spring Unit** is a 961-acre parcel of land located approximately 2 miles southwest of Parowan city (see appendix B-3). It is located in Township 34 south, Range 9 west, parts of sections 25, 26, 27, 33, 34, and 35.

The **Summit North Unit** is 1520 acres located approximately a half mile east of Summit town (see appendix B-4). It is located in Township 34 south, Range 9 west, including parts of sections 29, 30, 31, and all of section 32.

The **Summit South Unit** is 1120 acres in Township 35 south, Range 10 west, including parts of sections 1, 2, and 11. This unit is located approximately 1 mile southwest of Summit town (see appendix B-5).

The **Elliker Basin Unit** adjoins the Summit South Unit on its western edge totaling 2996 acres (see appendix B-6). The unit is located approximately 2 miles southwest of Summit town, in Township 35 south, Range 10 west, including portions of sections 3, 9, 10, 14, 15, 16, 20, 21, 22, and 23.

LAND ACQUISITION HISTORY

The Parowan Front WMA was purchased from many different sources. The first 618 acres of the Red Creek Parcel of the Paragonah Unit was purchased on May 16, 1961, from Alma and Bessie M. Stubbs (see appendix C). On July 3, 1961, the 121-acre Robinson Parcel of the Paragonah Unit was purchased from Gilbert and Erma Ipson Robinson. The remaining 172 acres of the Red Creek Parcel were purchased from the BLM on May 19, 1966.

Two purchases were made to form the Maple Spring Unit. The first 441 acres were purchased from E. Ray and Anna M. Lyman on December 6, 1952, with the use of a federal aid grant. An additional 520 acres was purchased from Wesley and Ila Lowe Bauer on September 15, 1954.

The first piece of the Summit North Unit (439 acres) was purchased from Albert T. and Belle P. Lawrence on August 28, 1961. On April 17, 1984, a land trade was completed with the BLM wherein the DWR traded land in Washington County for 2,271 acres along the Parowan Front. Of the land acquired in the trade, 440 acres has become part of the Summit North Unit. A 641-acre section of land was purchased from SITLA on March 26, 1985, which also became part of the Summit North Unit.

The land trade referenced above was the first acquisition of the Summit South Unit and yielded 880 acres. On February 19, 2013, a land trade was completed with SITLA for 661 acres, of which 240 acres became part of the Summit South Unit.

Part of the Elliker Basin Unit (988 acres) was purchased from Noah Henry Elliker on February 26, 1955. On October 24, 1966, 638 acres of the Elliker Basin Unit was purchased from Ralph M. and Fannie Louise Clendenin. An additional 950 acres of the previously mentioned BLM land trade makes up a portion of the Elliker Basin Unit. The remainder of the unit is made up of 420 acres acquired in the above mentioned 2013 trade with SITLA.

A Pitman-Robertson federal aid grant was used for all land purchases in the Parowan Front WMA. The land in Washington County traded to the BLM for land along the Parowan Front was also purchased with federal aid dollars, so federal regulations still apply.

ENCUMBRANCES

WATER RIGHTS/DEVELOPMENTS

On the Summit North Unit, SITLA reserved the water rights to an unnamed spring above Third Spring (Water Right 75-1315). Summit Culinary Water Users Inc. own the water rights to Second Spring (Big Spring) (Water Right 75-557, a19566). On October 20, 1986, the Division granted an easement to Summit Special Service District to construct and maintain a culinary water pipeline from Second Spring across the unit to the town of Summit. The Summit Special Service District holds easements for a water tank and a waterline running from the tank to the town of Summit. The Summit Irrigation Company has an irrigation pond that services the irrigation system. This pond is at the southeast corner of the Summit North Unit.

Security Title of Southern Utah has an established point of diversion out of the East Fork of Braffits Creek (Water Right 73-566) on the Elliker Basin Unit. The BLM has a water right to water stock out of Jones Dairy Creek (Water Right 73-1527).

On the Paragonah Unit the BLM has a point of diversion out of the South Fork of Red Creek (Water Right 75-738). The entirety of the Red Creek Parcel is subject to all vested and accrued water rights that existed at the time of purchase from the BLM. See appendix D for table of water right information.

MINERAL DEVELOPMENT

The previous owners reserved the mineral rights to the Robinson Parcel of the Paragonah Unit. On the Red Creek Parcel the federal government reserved the mineral rights in addition to a clause that states that said land must be used for the original grant purpose and is subject to all vested and accrued water rights, ditches, reservoirs, and rights of ways for ditches and canals. The federal government reserved mineral and mining rights, and rights associated with mining including prospecting and removal of material on this unit as well. In the mid-1970s Chevron Oil Company conducted a soil and temperature survey on the Red Creek Parcel of the unit.

The federal government reserved the mineral rights on the land received from the BLM in the Summit North Unit. The State of Utah reserved the mineral rights to section 32 of the Summit North Unit.

The federal government reserved all mineral rights on the Summit South Unit. A permit was given to Grant Geophysical to conduct seismic surveys on the Summit South Unit in 1984. Grant Geophysical was also permitted to perform seismic surveys on the Elliker Basin Unit.

RIGHTS OF WAY

The BLM retained rights of ways for all existing ditches, reservoirs, and canals that existed on the Red Creek Parcel at the time of purchase from the BLM.

On October 20, 1986, the DWR granted an easement to Summit Special Service District to construct and maintain a culinary water pipeline from Second Spring across the Unit to the town of Summit. The Summit Special Service District holds easements for a water tank and a waterline running from the tank to the town of Summit. All ditches and canals that existed at the time of the 1984 transfer from the BLM were given rights of way previously, which are still in effect. The Division granted an easement across the Summit North Unit to U.S. West Communications Inc. for construction and maintenance of a fiber optic line on January 28, 1994.

The Robinson Family maintains a road right of way through the North Parcel of the Elliker Basin Unit to adjacent private land. Frank W. and Celestia Nichols have a road right of way through the South Parcel of the Elliker Basin Unit to the adjacent BLM and private land.

III. PROPERTY INVENTORY

EXISTING CAPITAL IMPROVEMENTS

ROADS

A portion of the Red Creek Reservoir Road, which is maintained by Iron County, runs through the northeast corner of the Red Creek Parcel of the Paragonah Unit. An unimproved road runs through the Robinson Parcel (see appendix B-2).

There are two roads running through the Maple Spring Unit, which are rocky and unimproved (see appendix B-3). One of the roads runs through the unit onto adjacent BLM lands to Mahogany Seep. The other runs to Maple Spring, and then continues to a dead end on adjacent BLM land.

On the Summit North Unit there are also several roads that run into and through the property (see appendix B-4). One of the roads is the Summit Canyon Road, which is maintained by Iron County. Another road runs through the unit west of Second Mound and into the Red Hills Subdivision. Old highway 91 runs through the north edge of the unit and is maintained by the Iron County.

The Summit South Unit includes several unimproved roads (see appendix B-5). A portion of the road that comes south out of the town of Summit is claimed as a county road until it crosses onto private property. There are also several administrative-access only roads used for maintenance on the northwest edge of the unit.

The Elliker Basin Unit includes multiple unimproved roads and one asphalt road with a complex history. The asphalt road was initially intended to provide access to a private development in Braffits Creek above the WMA. The development ultimately went bankrupt and forfeited on the plans that would have granted a right-of-way easement. A portion of this road is managed as a seasonally closed road, and ultimately if the development ever proceeds, a new right-of-way easement will need to be negotiated (see appendix B-6).

FENCING

Portions of the WMA are fenced to manage livestock and maintain property boundary lines.

On the Paragonah Unit the Red Creek parcel has fencing along both the eastern and western boundary. Much of this fence is in poor condition, however the eastern boundary has been improved over the past couple of years working cooperatively with an adjacent private landowner. These enhancements should better control livestock trespass on both the WMA and the private property accessed through the WMA.

The Maple Spring Unit is unfenced; however, Maple Spring has been fenced to protect the riparian area from cattle.

The Summit North unit is fenced on the north and west sides.

The Summit South Unit is fenced on the north side and partially on the west side along the private property border.

The Elliker Basin Unit is fenced on the north and west sides.

PHYSICAL FACILITIES

There are no physical facilities on the Parowan Front WMA.

HABITAT PROJECTS

Habitat projects have been conducted on the Parowan Front WMA since the 1960's, though there are limited records of practices and dates. Since the creation of the Watershed Restoration Initiative (WRI) in 2006 just over 2,500 acres have been treated, primarily to enhance mule deer winter range. These treatments (WRI projects 546, 1468, 1496, 3070, 3435, 4961, 4990, 5748, and 5758) generally have been pinyon and juniper tree removal and seeding. In 2020, 580 acres of the Summit South and Elliker Basin Units were masticated and seeded along with neighboring BLM and SITLA lands (WRI project 4990). An additional 550 acres were lopped and scattered in 2022 on the Elliker Basin, Maple Spring, Summit North and South Units (WRI project 5758). In 2023 a mastication and seeding project has been proposed (WRI project 5948). If approved it will treat 465 acres on the Maple Spring unit that will complement mastication on the adjacent BLM. Additionally, the water system in Maple Spring will be replaced and provide water to the BLM and the WMA for better distribution of wildlife and livestock.

Since 2018 the Dedicated Hunter Program has used volunteers to plant bitter brush to increase browse on the WMA. With the development of applications for smart phones, volunteers were

able to begin mapping the areas that they seeded starting in 2021 (WRI project 4961). This will help the DWR monitor and measure success.

Fencing is used to manage the use of livestock and distinguish property boundaries on the Parowan Front WMA. Fencing can also pose a threat to mule deer and other wildlife because of entanglement and collision. In 2022, 1.07 miles of boundary fence was reconstructed with wildlife friendly fencing on the Summit South Unit (WRI project 6103).

Future projects may include browse planting, sagebrush restoration, fence removal and construction, as well as erosion control intended for improving mesic and riparian habitats.

IRRIGATION

There are no active or planned areas for irrigation on the Parowan WMA.

CULTURAL RESOURCES

As of 2023, approximately 12% of the WMA has been surveyed for cultural resources over the past three decades. The most recent survey efforts were associated with vegetation management projects. Within the previously surveyed area, 96 archaeological sites have been recorded. The majority of these sites are prehistoric artifact scatters, primarily consisting of lithic materials. A significant portion of the 96 recorded sites is from the historic period and generally consist of historic artifact scatters with occasional diagnostic artifacts. Approximately one quarter of the recorded archaeological sites were determined to be eligible for the National Register of Historic Places, though none have been listed. The remaining sites were determined not eligible for the National Register. While the limited number of completed archaeological surveys may not be representative of the site density across the entire WMA, these surveys show the area generally has high archaeological site densities at approximately one site per fifteen acres. Statewide, site densities average one site per sixty acres.

There is a lathe and plaster walled dugout cabin just west of First Spring adjacent to the road that runs north south through the Summit North Unit. Next to the dugout there is a dugout root cellar, and above the dugout there is a building foundation. The structures are in a severe state of disrepair; both the root cellar and dugout are filled with silt. The roofs are mostly missing on the dugout and the root cellar, and the foundation's floorboards are rotting and weathered.

There is a small complex of ruins on the Elliker Basin Unit North Parcel. The ruins are a complex of rock walls and rooms measuring about 250 feet north-south by 100 feet east-west.

SPECIES OF GREATEST CONSERVATION NEED

The Utah Wildlife Action Plan was created “to manage native wildlife species and their habitats, sufficient to prevent the need for additional listings under the Endangered Species Act.” The State of Utah has identified several Species of Greatest Conservation Need (SGCN), which “do, or potentially could, present the possibility of an ESA listing.” Threats to these species are described in the Utah Wildlife Action Plan. Up to 8 SGCNs could potentially occur on lands managed under this plan. For many of these, very little is known about the species and surveys have not been conducted in this area.

Utah prairie dog (*Cynomys parvidens*)

There are 2 inactive colonies of the federally listed (threatened) Utah prairie dog (UPD) in the Summit North Unit and one in the Summit South Unit of the WMA. The last UPD sighting on the Summit North Unit was in 1997, and one UPD was counted on the South Summit Unit in 2015. The colony on the Summit South Unit extends west to I-15 and active portions on adjacent private property are within a half mile of the Summit South Unit’s northwest border.

Pinyon jay (*Gymnorhinus cyanocephalus*)

There are historic records and recent observations of Pinyon Jays within the Parowan Front WMA and within one half mile radius of the WMA.

Bald eagle (*Haliaeetus leucocephalus*)

There are current and historic records of bald eagle within a half mile radius of the Parowan Front WMA. Wintering bald eagles are known to forage nearby and perch in trees found on the WMA.

Golden eagle (*Aquila chrysaetos*)

There are resident golden eagles that are often observed foraging in the open sagebrush areas and neighboring rangelands.

Pygmy rabbit (*Brachylagus idahoensis*)

There are no documented sightings of pygmy rabbits on the WMA, although the WMA does provide suitable habitat.

Peregrine Falcon (*Falco peregrinus*)

Peregrine Falcons have not been documented on the Parowan Front WMA, but local birders have reported identifying peregrine falcons near the WMA. Habitat conditions on the WMA and nearby are suitable for peregrine falcons.

Ferruginous hawk (*Buteo regalis*)

Ferruginous Hawks have not been documented on the Parowan Front WMA, but local birders have reported identifying ferruginous hawks near the WMA. Habitat conditions on the WMA and nearby are suitable for ferruginous hawks.

Burrowing owl (*Athene cunicularia*)

Burrowing owls have not been documented on the Parowan Front WMA. Suitable habitat for burrowing owls is found within the WMA.

An unidentified species of springsnail has been found in a spring on the Summit North Unit. In accordance with the Conservation Agreement for Springsnails in Nevada and Utah, springsnails and their habitat on the Parowan Front WMA will be protected by maintaining spring source fencing and preventing spring water depletion.

IMPORTANT FISH AND WILDLIFE HABITATS

In addition to the SGCNs listed above, the Parowan Front WMA provides crucial habitat for mule deer, elk, turkey and several other upland game species. The exclusion fencing along Interstate 15 in Iron County has severely impacted seasonal migrations of big game to historic winter habitat west of Interstate 15. Due to this fragmentation the Parowan Front WMA is a critical part of the winter range for the Panguitch Lake Wildlife Management Unit (Unit 28).

GENERAL CONDITIONS OF HABITATS

HABITAT TYPES

The Parowan Front WMA consists of several vegetation types including Basin Big (*Artemesia tridentata tridentata*) and Wyoming sagebrush (*Artemesia tridentata wyomingensis*), Pinyon Pine (*Pinus edulis*) and Utah Juniper (*Juniperus osteosperma*), and Gambel Oak (*Quercus gambelii*) ecological sites. The WMA is characterized as a sagebrush lowland transitioning to pinyon-juniper hillsides with gambel oak ridges mixed with bitterbrush (*Purshia tridentata*) and mountain mahogany (*Cercocarpus ledifolius*). Surface water is seasonal besides Second Spring on the Summit North unit, which is fenced off from livestock. The spring is collected and piped to a trough which overflows into a small earthen-bank depression.

RANGE AND WATERSHED CONDITIONS

There are four DWR Range Trend monitoring sites (2 on the WMA and 2 on adjacent BLM land) and a monitoring site on one of the WRI treatments on the WMA. The four Range Trend sites indicate stable to declining range conditions due to invasive species, primarily cheatgrass (*Bromus tectorum*), dominance of introduced species crested wheatgrass (*Agropyron cristatum*) and intermediate wheatgrass (*Thinopyrum intermedium*), pinyon and juniper encroachment, and lack of age class diversity in the sagebrush. The WRI site was established prior to a mastication and seeding project that took place in 2019. Post treatment data in 2022 show favorable response to the treatment with large increases in seeded species that were present prior to the mastication. Cheatgrass is present and has increased post treatment.

RIPARIAN CORRIDORS AND WETLANDS

Water is limited on the WMA and there are no perennial streams. Surface water is seasonal.

HABITAT LIMITATIONS

Drought conditions have had negative effects on the Parowan Front WMA. The WMA has experienced a decline in plant vigor and poor production due to drought conditions. As drought conditions persist, the establishment of younger sagebrush and other browse may be negatively affected. Drought should be a consideration in the WMA management to promote healthy stands of sagebrush that continue to recruit new plants.

Invasive species management is critical for future management of this WMA. Cheatgrass and other weeds will need to be managed to sustain the desired wildlife habitat values. As other invasive species are documented, rapid response strategies are needed to prevent further spread.

HUMAN USE RELATED PROBLEMS

Allowed human uses will include hunting, livestock grazing, wildlife viewing, hiking, and horseback riding. OHV use will be allowed on the Parowan Front WMA only on designated right of ways and marked open roads. Destruction and/or degradation of wildlife habitat from any of these uses may result in further restrictions to protect the resources. Litter is a problem on this unit and has degraded wildlife habitat. Creation and use of unauthorized roads is also a concern on the WMA. Winter road use causes unnecessary stress on wintering mule deer.

The creation of new roads and trails on the Parowan Front WMA will be limited in an effort to continue to conserve and enhance habitat for wildlife in this area. New roads may only be allowed after considering the potential effects on wildlife and following DWR protocol. As per the Access Management Plan (Appendix A) roads and trails that serve no purpose and damage wildlife habitat by deviating from established roads and reducing browse, forbs, and grass species will be permanently closed.

ADJACENT LAND USES AND POTENTIAL IMPACTS

BLM, Forest Service, private lands and SITLA lands border the Parowan Front WMA. Livestock grazing occurs on most of the adjacent federal lands. Much of the private and SITLA land is grazed as well. In addition, many private lands adjacent to or nearby the WMA are farmed, with alfalfa being the main crop. Some of the adjacent private land is being developed and subdivided, further diminishing the already limited quantity of winter range for deer east of Interstate 15. Fence maintenance is important to avoid livestock trespass. Habitat improvement is important to minimize wildlife depredation on surrounding agricultural lands and to counteract the loss of habitat in surrounding areas due to development.

ZONING AND LAND USE ORDINANCES

The Parowan Front WMA is zoned for agriculture. It should also be noted that many of the private lands adjacent to the WMA have been converted from agricultural zoning to residential subdivision zoning. This has increased the market value of Division lands but decreased the value of wildlife habitat in these areas.

IV. MANAGEMENT GOALS AND OBJECTIVES

The management of the Parowan Front WMA considers the goals, objectives, and strategies of other DWR planning efforts, as well as county and state resource management plans. These plans include, but are not limited to, the DWR Strategic Plan, the Utah Wildlife Action Plan, and species-specific management plans. Some of these plans are briefly discussed below. *Note: this is not a comprehensive review of the listed plans, but a summary of relevant objectives and strategies contained within those plans.*

DWR STRATEGIC PLAN

The management of the Parowan Front WMA will be consistent with the goals and objectives of the DWR Strategic Plan:

- Agency goal: Create a culture of respect, innovation, efficiency and effectiveness within the Utah Division of Wildlife Resources.
 - Objective A6 - Increase our coordination with partners, including local, state and federal agencies; non-governmental organizations; universities and others.
- Constituency goal: Strengthen support for wildlife management by demonstrating the value and importance of wildlife to all Utahns.
 - Objective C1 - Increase participation in fishing, hunting, and other wildlife-related activities.
 - Objective C5 - Increase understanding of how the broader public views and values wildlife - and how it contributes to their quality of life - and take reasonable steps to address their needs, wishes, and priorities.
 - Objective C6 - Increase hunting and fishing opportunities.
- 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 R4 - Decrease risks to species and their habitats through integrated implementation of the Wildlife Action Plan, species recovery plans, conservation agreements and other management plans.

Objective R7 - Decrease the number of wildlife – related incidents – including property damage, crop depredation and threaten or endanger species – that negatively affect private property owners.

WILDLIFE ACTION PLAN

The 2015 Utah Wildlife Action Plan (WAP) was created with the goal “to manage native wildlife species and their habitats, sufficient to prevent the need for additional listings under the Endangered Species Act.” The WAP identifies wildlife species most in need of conservation attention and the habitats they require for survival. The WAP includes a statewide threat assessment, which identifies threats to each key habitat and then ranks the impact of that threat according to the number of SGCN’s that could be affected. The Parowan Front WMA contains multiple key habitats listed in the WAP. The threats listed below are not a comprehensive list of statewide threats identified for these habitats but are those that may be most relevant on the WMA. Management activities on the WMA will attempt, to the extent possible, to address these priority threats, and will use the suggested strategies for management as outlined in the WAP.

GAMBEL OAK

Priority threats include:

- Invasive Plant Species – Non-native (Medium)
- Inappropriate Fire Frequency and Intensity (High)

Strategies for management include:

- Promoting policies and management that allow fire to return to a more natural regime.

- Promoting and funding restoration that reduces the uncharacteristic class, including cutting/mulching of invading pinyon and juniper trees, and herbicide or mechanical treatment of non-native invasive species such as cheatgrass and smooth brome.
- Continuing the funding and support for weed abatement programs, including “early detection – rapid response” programs.

LOWLAND SAGEBRUSH

Priority threats include:

- Inappropriate Fire Frequency and Intensity (Very High)
- Droughts (High)
- Invasive Plant Species - Non-native (Very High)
- Housing and Urban Areas (Medium)

Strategies for management include:

- Creating and maintaining fuel breaks to prevent fire from reaching remaining unburned acres.
- Enhancing the prevention and suppression of ignitions in these unburned areas.
- Enhancing the prevention and suppression of ignitions in areas that have burned once, which often retain a component of recovering native vegetation and are good candidates for otherwise-passive restoration.
- Utilize the latest and best technology (such as herbicides) for control of invasive annual grasses.
- Continuing the search for effective plant-restoration materials and methods that can be affordably translated from the research plot scale, to the operational project scale.

MOUNTAIN SAGEBRUSH

Priority threats include:

- Invasive Plant Species – Non-native (Medium)
- Roads – Transportation Network (Medium)
- Droughts (High)
- Inappropriate Fire Frequency and Intensity (Medium)

- Housing and Urban Areas (Medium)
- Improper Grazing (current) (High)

Strategies for management include:

- Promoting policies and management that allow fire to return to a more natural regime.
- Promoting policies that reduce inappropriate grazing by domestic livestock and wildlife.
- Promoting and funding restoration that reduces the Uncharacteristic and surpluses of older age class, including: Dixie/chain harrow, brush mowing or other treatments that reduce the older age class and stimulate the younger/mid age classes; herbicide or mechanical treatment of non-native invasive species such smooth brome; single tree mulching/cutting of invading conifer.
- Continuing the development of new plant materials, especially native forbs.
- Promoting zoning/policies/laws that lead to responsible human/energy intrusion and development.
- Promoting management that includes seeding a diversity of grasses, forbs and shrubs that will lead to increased resiliency and resistance in the plant community.

WILDLIFE SPECIES MANAGEMENT PLANS

Unit management plans for deer and elk on Unit 28 call for direct range improvements on winter range, working with partners through Utah's Watershed Restoration Initiative for fire rehabilitation, managing vehicle access on DWR lands to limit disturbance to wintering big game, and addressing pinyon and juniper encroachment through the use of proactive treatments. The State of Utah Turkey Management Plan places a high priority on winter habitat and medium priority on improving breeding and summer habitat. Similar to the unit management plans for deer and elk, the wild turkey plan addresses the need for maintaining range conditions, reducing disturbances, and proactive habitat improvements to support wild turkey populations. All these directives have historically been implemented and will continue to be implemented on the Parowan Front WMA.

LOCAL RESOURCE MANAGEMENT PLANS

In 2015, the Utah Legislature passed H.B. 323 which required each county to develop a Resource Management Plan (RMP) as part of the county's general plan. The State of Utah aggregated the land use decisions and directives that emerged from the county plans, and in

2018 published a RMP for the State of Utah. These local resource management plans were created to address and remedy a disconnect between local land use needs/desires and federal land use planning. The county and state RMPs are intended to provide a basis for coordinating with the federal government. Counties also utilize their RMP's as a basis for coordinating with State planning activities.

Under Utah State Code 63L-10-104, "State agencies and political subdivisions shall refer to and substantially conform to the statewide resource management plan when making plans for public lands or other public resources in the state."

Local RMPs applicable to the Parowan Front WMA include the statewide RMP and the Iron County RMP. Management of the WMA will be consistent with these local resource management plans to the extent possible.

V. STRATEGIES FOR PROPERTY MANAGEMENT

DEVELOPMENT AND ANNUAL MAINTENANCE ACTIVITIES

As discussed in the introduction, an advisory committee met two times during fall of 2022 and winter of 2023 to brainstorm and frame ideas they would like to see addressed on the WMA. Several of these ideas are outlined below and will be carried out in the development and annual maintenance activities on the WMA. In addition to these ideas, typical annual maintenance duties include weed control, fence maintenance, road maintenance and signage:

- Work with law enforcement and wildlife sections to identify fence(s) that are problematic to deer and replace with wildlife friendly fence(s).
- Work with law enforcement to address illegal use of trails and roads on the WMA. Keep signage current and legible throughout the year.
- Maintain and improve water developments to provide water for wildlife and permitted livestock.

VI. STRATEGIES FOR HABITAT IMPROVEMENT

HABITAT IMPROVEMENT PLAN

The advisory committee developed ideas for the habitat improvement plan outlined below:

- Continue with removal of encroaching pinyon and juniper including the maintenance of previous treatments.
- Plant bitterbrush seed using volunteers and division personnel using hand planters and the “bitterbrush planter”. Target plantings in areas that are in early successional states and or have recently burned.
- Locate areas for planting sagebrush in recently treated areas to increase the amount of available browse on the landscape.
- Conduct experimental use of herbicides such as Rejuvra® and Plateau® to control invasive cheatgrass. Expand on these using lessons learned from previous treatments.
- Install low-tech erosion control structures, primarily hand-built rock, or wood structures (Zeedyk Structures), enhancing the seasonal stream and associated riparian woody species, and hand seed around these structures with forbs to increase the amount of forage on the landscape.

ACCESS MANAGEMENT PLAN

Motorized access to the WMA is provided through a series of roads. Some of which are seasonally closed. Overland travel is limited to foot and horse traffic. The use of E-bikes is prohibited outside of the identified open and seasonally closed roads. Creation of new roads and trails is prohibited. Roads designated as seasonally closed or closed will be signed. In addition to the identified open and seasonally closed roads, there are several additional administrative roads that serve as access for maintenance and management purposes (See Appendix A).

FIRE MANAGEMENT PLAN

Fire suppression is the general practice within the Parowan Front WMA. Protecting browse species for wintering wildlife is the highest priority due to the difficulty associated with restoring browse species. Some limited prescribed fire may be used in the future in conjunction with the US Forest Service, BLM, and the Utah Division of Forestry, Fire, and State Lands in the oak communities as mentioned elsewhere in this plan.

In order to balance fire suppression practices on the WMA, an aggressive and proactive habitat restoration program has been and will continue to be implemented on the WMA. These restoration projects serve to reduce fire receptivity and behavior. Future projects will also focus on creating defensible space on our uphill borders that will allow for fire to be used on the upslope properties while mitigating risk to the winter range.

WOOD PRODUCTS

Cedar posts and firewood are the most likely available wood products available on the Parowan Front WMA, with little potential for Christmas trees. None of these are available in large enough quantities for commercial harvest, but individual use permits may be obtained through the Southern Region office.

VII. SUMMARY STATEMENT OF PROPOSED USES

The primary purpose of the Parowan Front WMA is to provide winter range for big game species. In addition, there is vital, high-quality turkey habitat on some of the units. Allowed recreation uses include hunting, wildlife viewing, hiking, and horseback riding. Dispersed camping will also be allowed but not promoted. OHV use will be allowed on the WMA only on designated right of ways and marked open roads. Destruction and/or degradation of wildlife habitat from any of these uses may result in further restrictions to protect the resource.

VIII. MONITORING AND EVALUATION

The district wildlife biologist in conjunction with the area habitat restoration biologist and other habitat staff will evaluate the habitat and prepare habitat improvement proposals. The district conservation officer will monitor human use of the Parowan Front WMA and propose management modifications if problems exist with input from habitat and wildlife staff. The Habitat Section of the Southern Region of DWR will present improvement projects to the Watershed Restoration Initiative, Habitat Council, and other sources for approval and funding.

IX. APPENDICES

APPENDIX A – PAROWAN FRONT ACCESS MANAGEMENT PLAN

Parowan Front WMA Access Management Plan

The Parowan Front WMA is crucial winter range for big game in the Panguitch Lake herd (unit 28). Due to the sensitive nature of wintering big game and the potential for human use to further stress animals the DWR has developed this access management plan to direct public access on the property.

Road Designation

The roads on the Parowan Front WMA will be designated in one of three categories: Open roads, Seasonally Closed Roads, and Permanently Closed Roads.

Open roads

These are roads that will be left open to the public year-round and are roads on established rights of way granted to Iron County, private landowners with land only accessible through WMA lands, or state agencies. Some additional roads that are less damaging to wintering wildlife and do not damage habitat may be left open for public access.

Seasonally Closed Roads

All roads will be closed seasonally from January 1st to April 30th each year that are not on established rights of way but are necessary for public access to the WMA. This will be done to limit disturbance of wintering big game. Seasonal closures will also help to remedy the winter depredation problems on surrounding private land by allowing big game to winter on the WMA undisturbed. All roads will be closed between these dates unless posted open (Utah Code section 41-22-10.1).

Permanently Closed Roads

All roads that are damaging to wildlife habitat and are unnecessary for public access or WMA management will be permanently closed (Utah Code section 41-22-13). The roads will be closed using signs, water bars, fencing and other obstructions. Some of the roads will be

plowed and reseeded. Others in low traffic areas will be blocked and allowed to return to a natural state.

Carrying out Closures

The Parowan Front WMA HMP revision committee worked together to determine the classification status for each road. The Iron County Commission will also be given a chance to review. See appendix B for maps of road designations.

Upon approval by the Director of DWR of the Habitat Management Plan, DWR will carry out closures and signing.

OHVs (including E-bikes)

OHVs will be allowed on open and seasonally closed roads only (Utah Code section 41-22-10.1). Use on seasonally closed roads is limited to the period of May 1 – December 31 annually. There are no existing legal OHV trails on the WMA (Utah Code section 41-22-13). There are roads that run through the WMA to access U.S. Forest Service administered lands; these will remain open, and allow OHV access to the WMA and adjacent federal land.

Enforcement of Closures

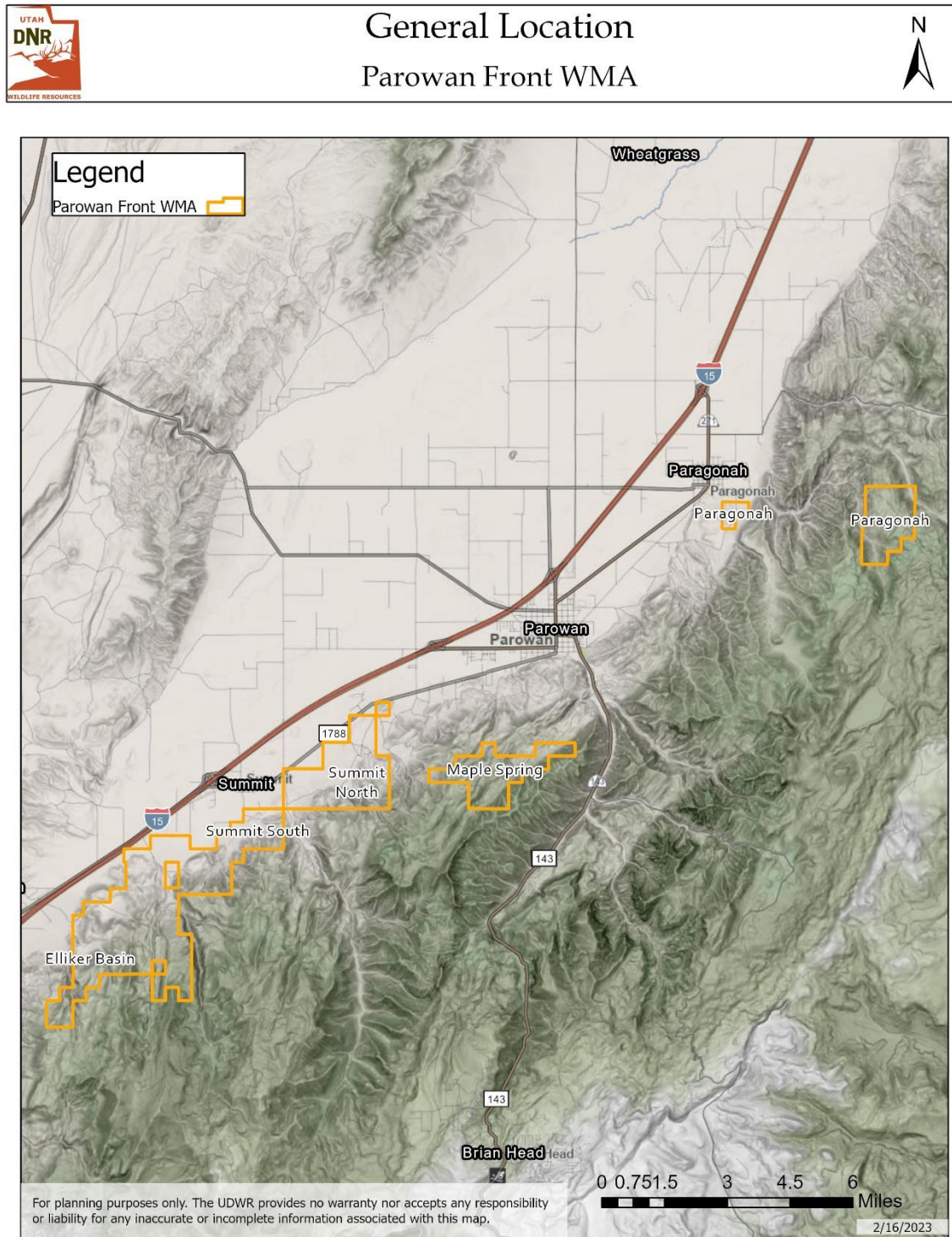
DWR Conservation Officers will carry out the enforcement of road closures. Iron County Sheriff's Department will also have jurisdiction (Utah Code Section 41-22-16). Trespass on closed roads is punishable as a class C misdemeanor and a monetary fine.

Informing the Public

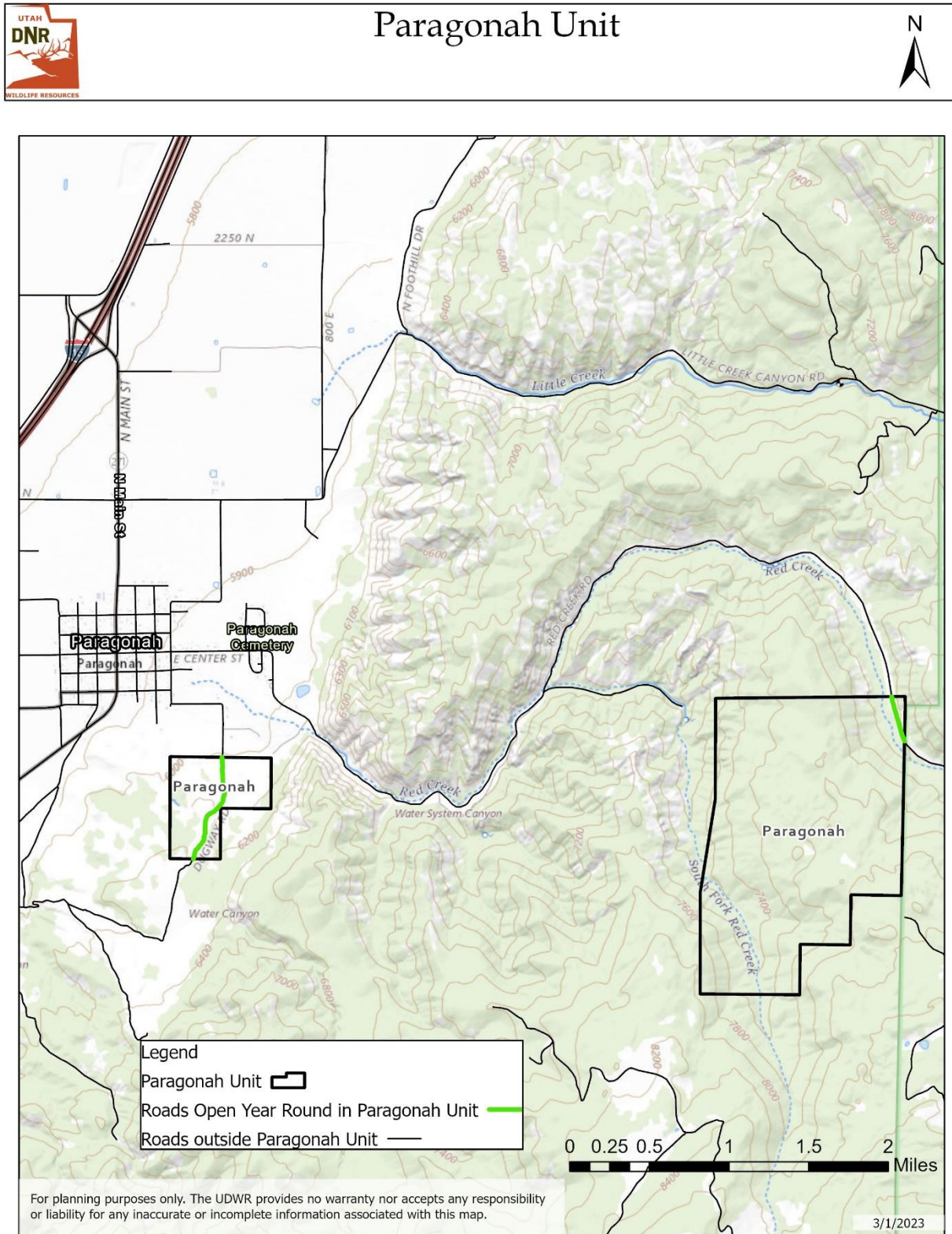
The public will be informed through signs at major access points, and on fence lines. The county will also be notified of our intent to close roads and given a chance to provide input. Signage will be done as a courtesy to the public rather than being necessary for enforcement (Utah Code section 41-22-10.1).

APPENDIX B - MAPS

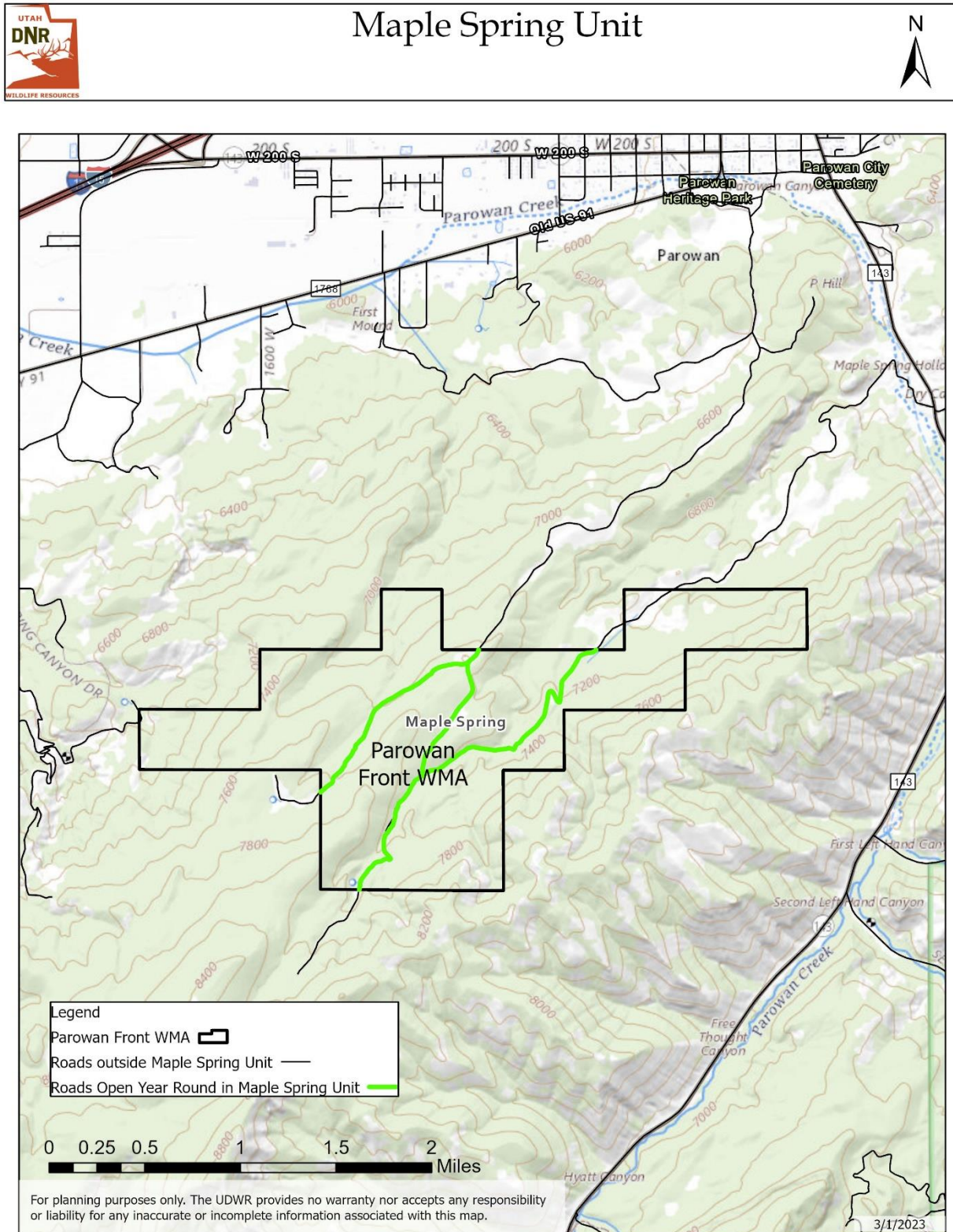
MAP 1 – GENERAL LOCATION MAP OF PAROWAN FRONT WILDLIFE MANAGEMENT AREA



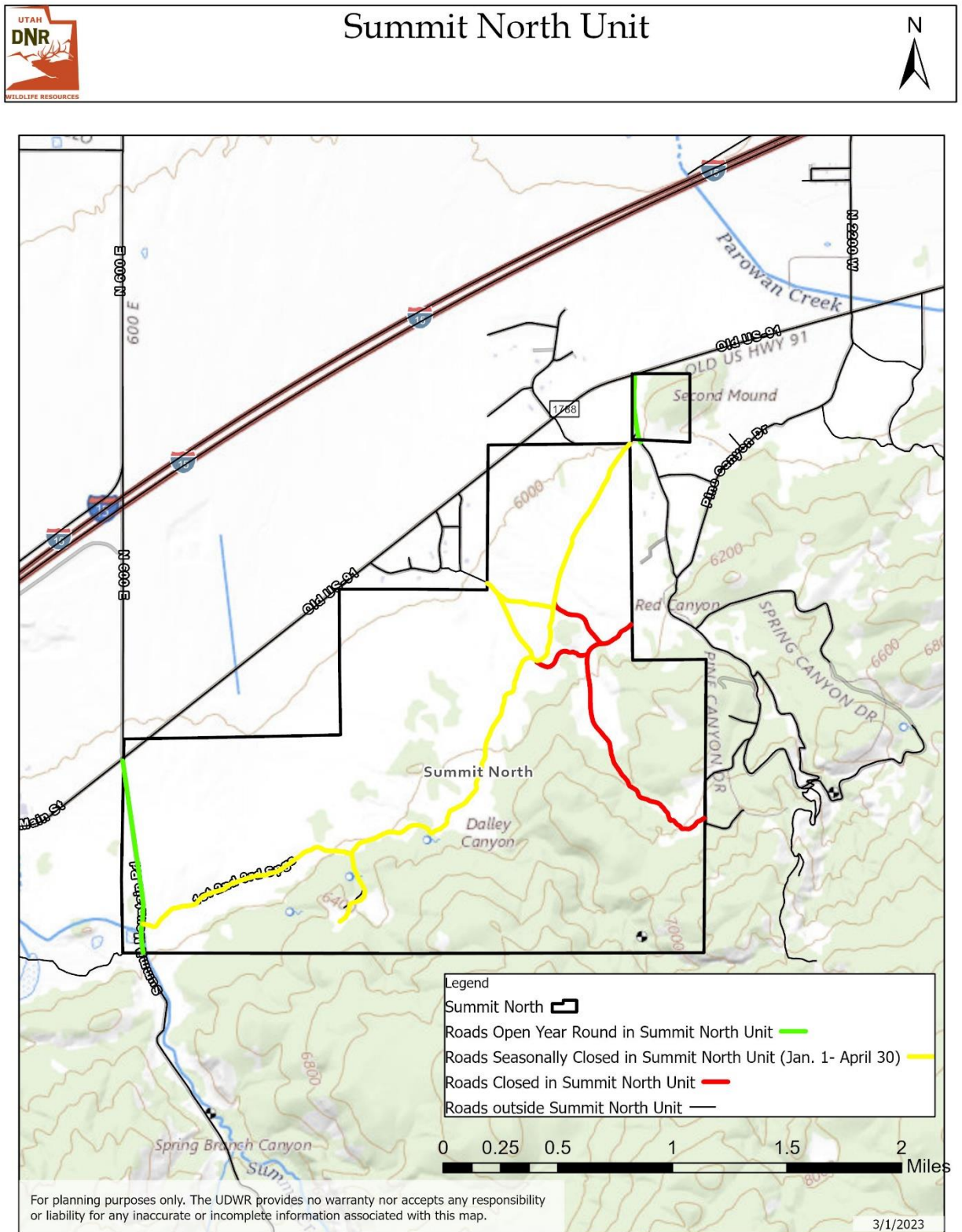
MAP 2 – PARAGONAH UNIT



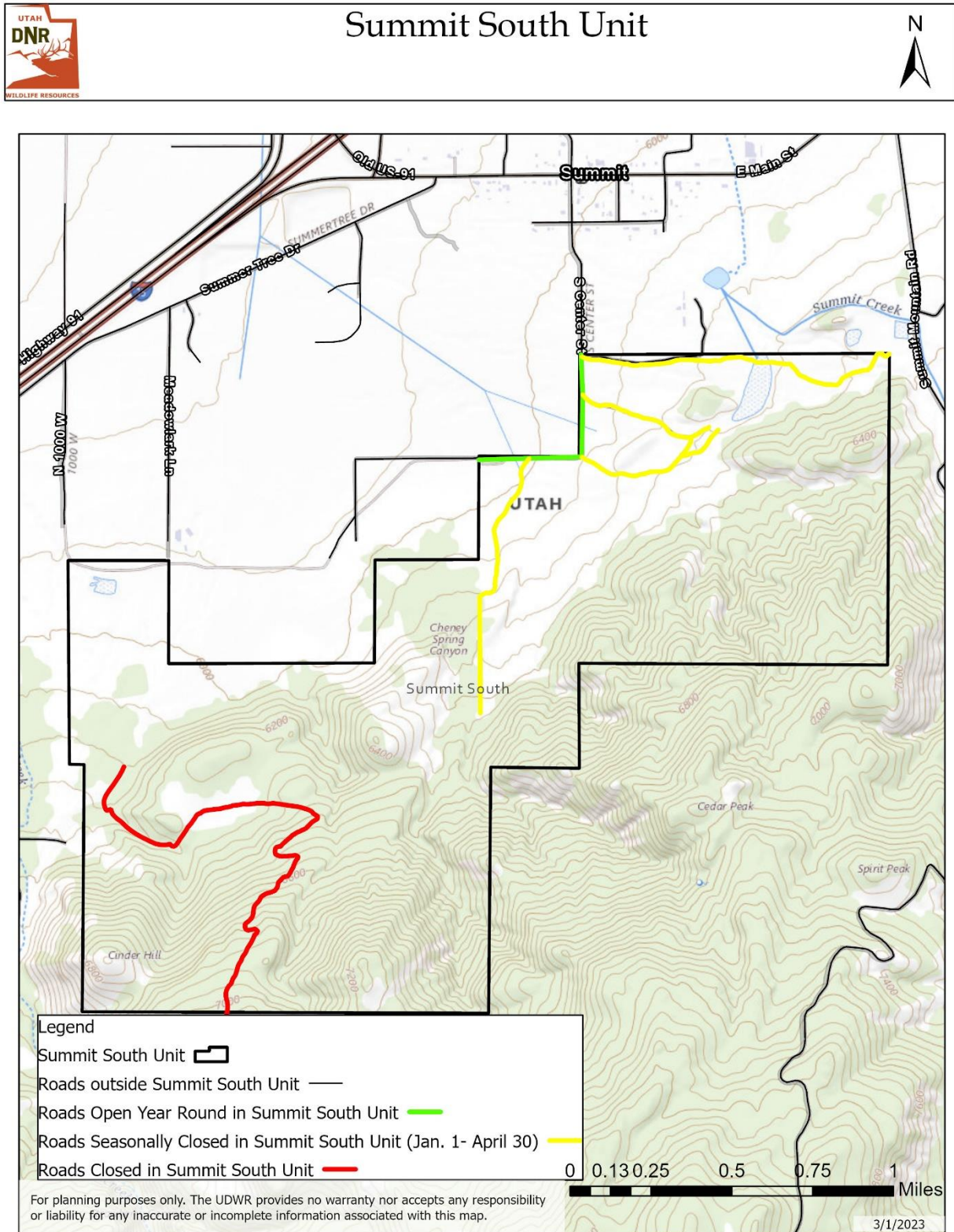
MAP 3 - MAPLE SPRINGS UNIT



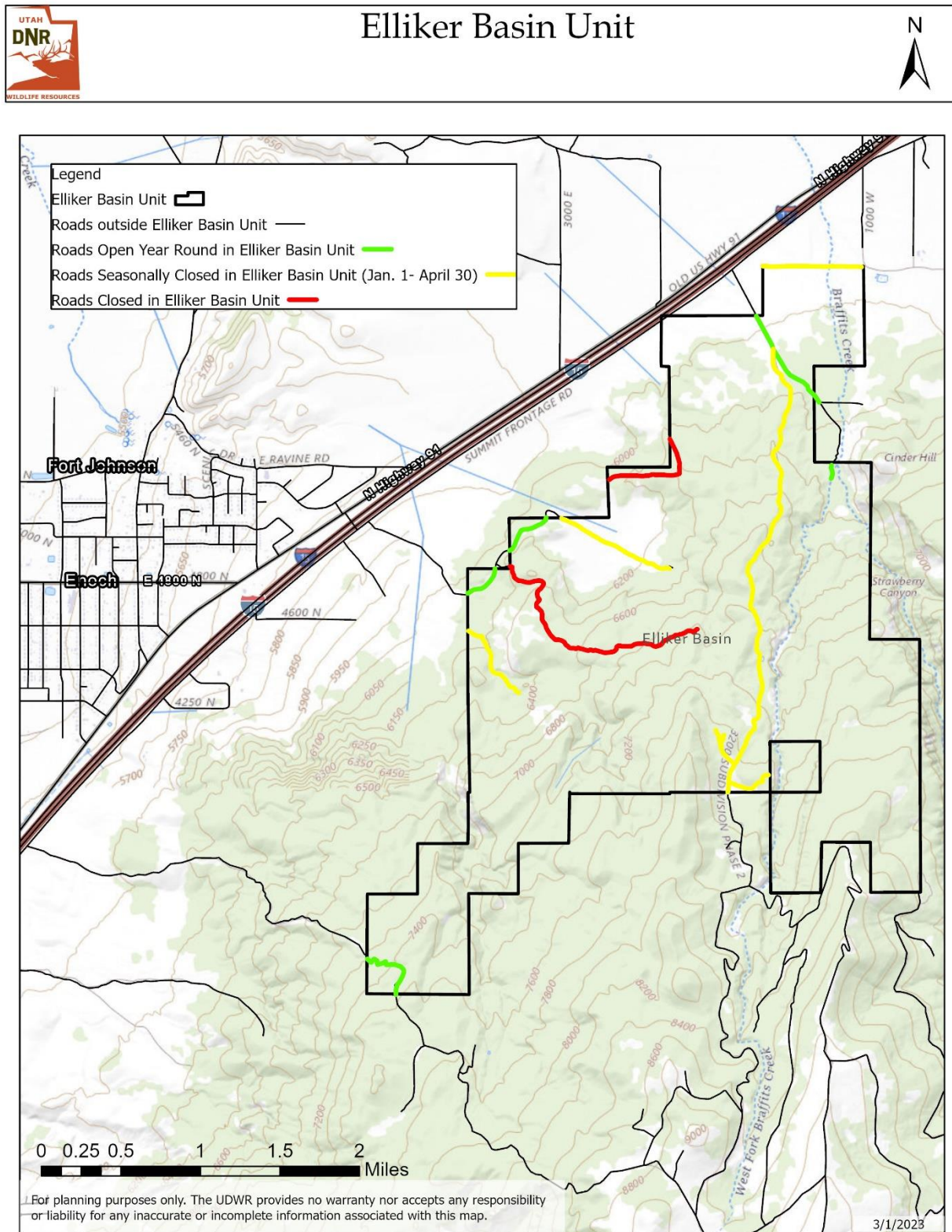
MAP 4 - SUMMIT NORTH UNIT



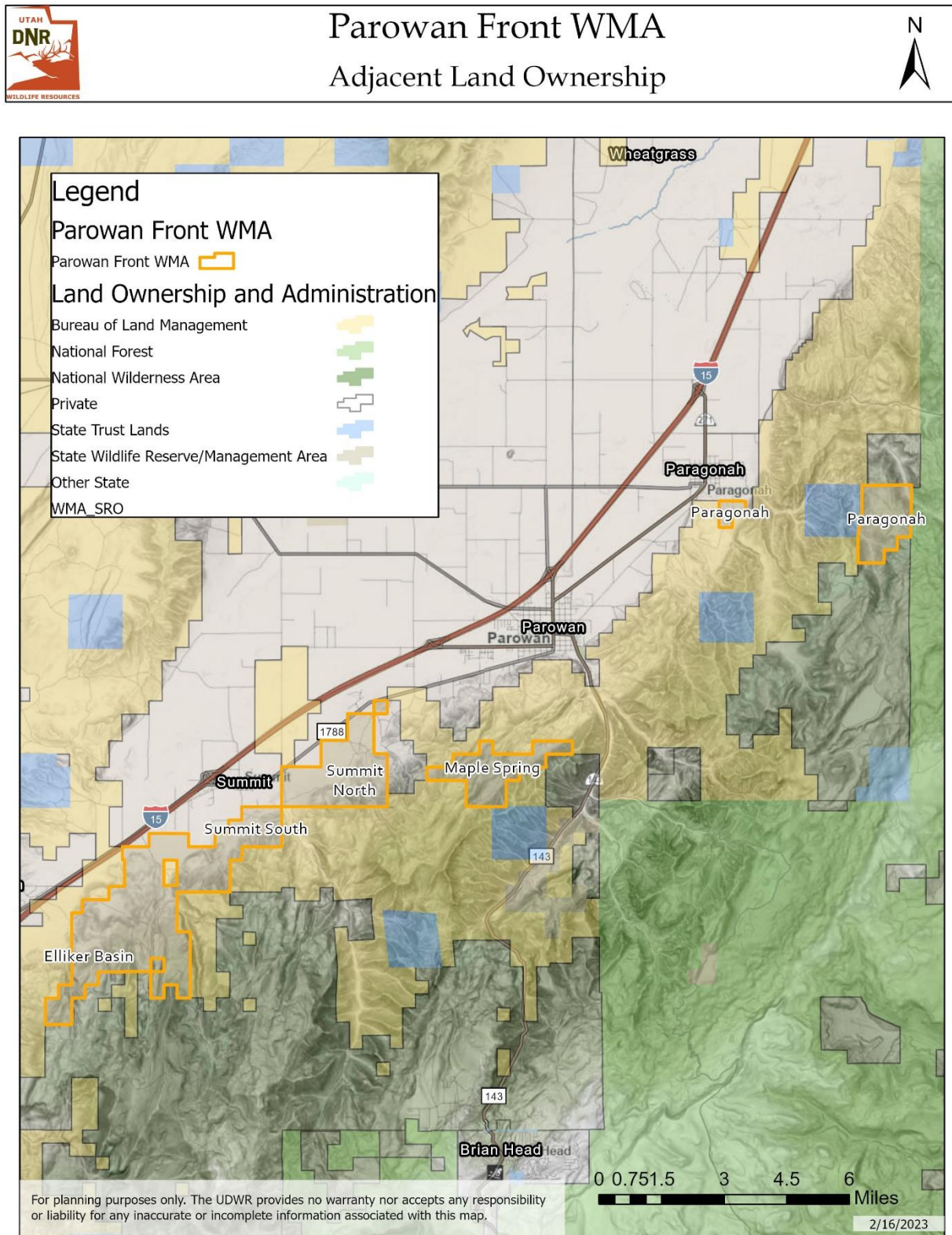
MAP 5 – SOUTH SUMMIT UNIT



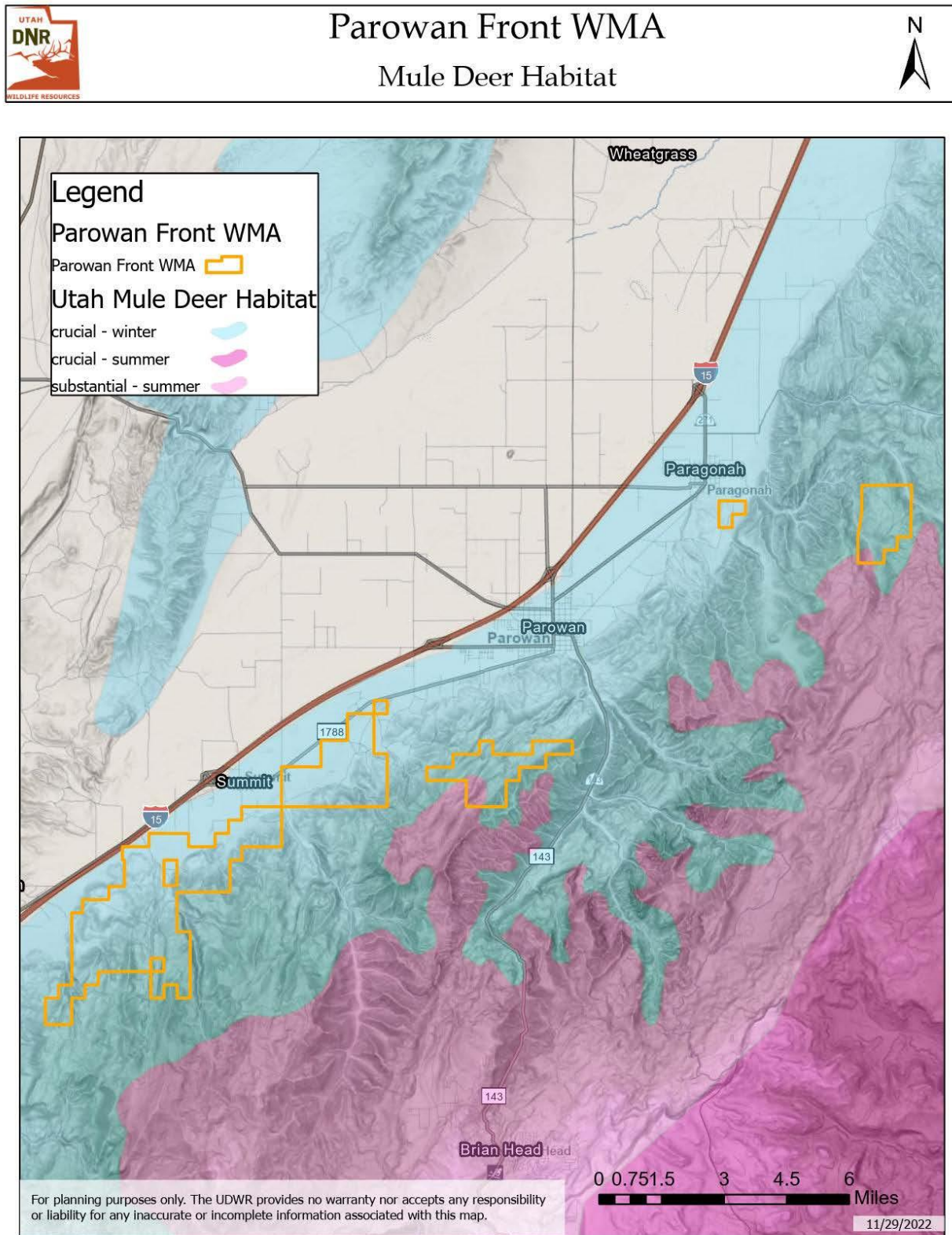
MAP 6 – ELLIKER BASIN UNIT



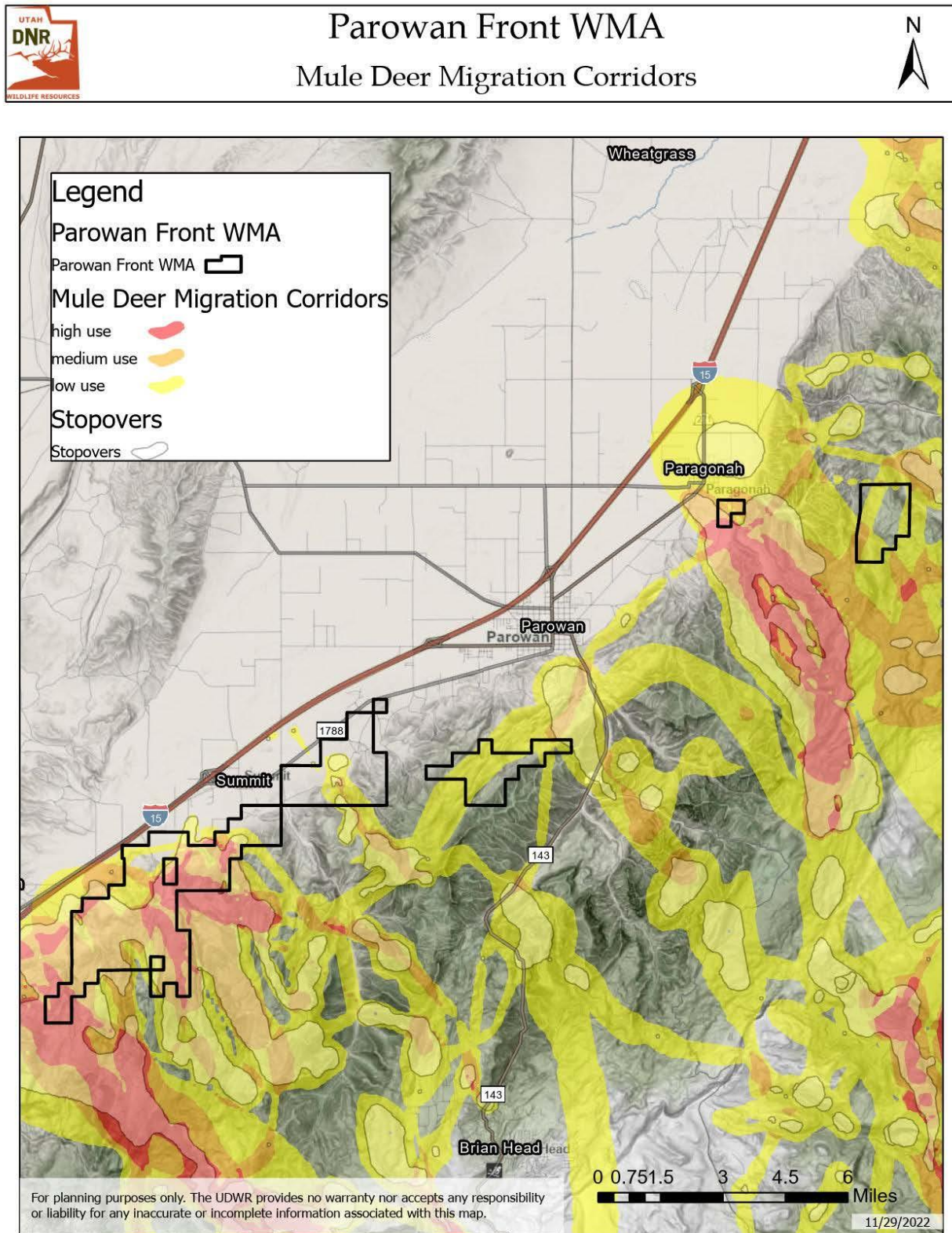
MAP 7 – ADJACENT LAND OWNERSHIP OF THE PAROWAN FRONT WMA



MAP 8 – MULE DEER HABITAT MAP IN PAROWAN VALLEY



MAP 9 – MULE DEER MIGRATION CORRIDORS ON PAROWAN FRONT



APPENDIX C - DEEDS

Copies of deeds associated with the Parowan Front WMA can be found at the Southern Regional Office of the Utah Division of Wildlife Resources, 1470 North Airport Road, Cedar City, Utah 84721

APPENDIX D - WATER RIGHTS INFORMATION

TABLE 1- PAROWAN FRONT WMA WATER RIGHTS

Water Right #	Source	Priority	Flow	Irrigated Acres	Stockwatering	Domestic #
73-1493	Red Pine Creek	1856			Supplemental 250 elu's	
73-1494	Red Pine Creek	1856			Supplemental 32 elu's	
73-1495	Red Pine Creek	1856			Supplemental 250 elu's	
73-1502	Jones Dairy Creek	1856			Supplemental 32 elu's	
73-1526	Braffits Creek	1856			Supplemental 80 elu's	
73-1527	Jones Dairy Creek	1856			Supplemental 560 elu's	
73-1528	East Fork Braffits Creek	1856			Supplemental 560 elu's	
73-1560	Elliker Spring Stream	1856			Supplemental 32 elu's	
73-1561	Elliker Spring Stream	1856			Supplemental 310 elu's	
73-1562	Pine Spring Stream	1856			Supplemental 32 elu's	

73-2044	East Fork Braffits Creek	1856			Supplemental 32 elu's	
73-2045	Jones Dairy Creek	1856			Supplemental 32 elu's	
73-2058	Braffits Creek	1856	7.0 acft		250 elu's	
73-2059	Braffits Creek	1856			Supplemental 80 elu's	
73-567	Jones Dairy Creek	1856			Supplemental 310 elu's	
73-568	Pine Spring Lake	1856			Supplemental 32 elu's	
73-569	Elliker Spring Area	1856	0.0556 cfs		Supplemental 32 elu's	
75-1720	Third Spring	1880	4.0 acft		Wildlife	
75-280	Big Spring	1880	16.45 acft	4.00		1 family
75-587	Maple Spring Creek	1856	1.008 acft		36 elu's	
75-814	South Fork Red Creek	1856			Supplemental 32 elu's	
75-815	Red Creek	1856			Supplemental 32 elu's	

APPENDIX E – LIST OF HMP COMMITTEE MEMBERS

Donnie Hunter – Local Sportsman

David Hulet – Livestock Permittee

Evan DeHamer – Mule Deer Foundation

Marilyn Wood – Iron County Commissioner

Mike Worthen – Iron County Natural Resource Management Specialist

Dustin Schaible – Bureau of Land Management

Jacob Benson – E&I Conservation District

Utah Division of Wildlife Resources Personnel