

Millville-Providence

WILDLIFE MANAGEMENT AREA



Lightning storm in 2013 which started a fire on the Millville WMA.

HABITAT MANAGEMENT PLAN

May 2021

Prepared by: Utah Division of Wildlife Resources Northern Region



DRAFT
Executive Summary
Millville –Providence Wildlife Management Area
Habitat Management Plan
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Primary Purposes of WMA

The Millville-Providence Wildlife Management Area (MPWMA) was purchased for the primary purposes of preserving and protecting big game winter range and wintering wildlife, and reducing deer and elk depredation on surrounding private properties. With roughly 41% of mule deer winter range in Wildlife Management Unit 2 being privately owned (See Table 3), the property provides habitat for wildlife and protects historical crucial big game winter range. Currently, many of the private properties north, south and west of the MPWMA are rapidly developing into residential properties. Additional purposes include providing recreational opportunities that support, and are consistent with, the primary purposes.

Background Information

The MPWMA is located on the eastern foothills of Cache County, east of Providence and Millville cities. The MPWMA has 3,199.82 acres that were acquired to protect big game winter habitat for deer and elk. The Property has two canyons (Millville and Providence Canyons) which both support riparian habitat. Blacksmith Fork Canyon and highway SR-101 form part of the southern boundary.

In July 1940, the Utah Department of Fish and Game (now the Utah Division of Wildlife Resources; UDWR) proposed to purchase lands on the Millville Face at the mouth of Blacksmith Fork Canyon in order to reduce crop depredation by big game in Cache Valley. A big game exclusion fence was installed along the western boundary of UDWR ownership to prevent big game animals from accessing private agricultural fields on the valley floor during the winter months. This fence has now been extended to the north by other parties, and is located from Blacksmith Fork Canyon on the south, to Logan Canyon on the north. Additional fencing has been installed over time to prevent illegal OHV use and to provide for an efficient grazing program.

Additional land parcels above the deer fence were slowly acquired and/or exchanged from the 1970's until 1995 to provide a contiguous band of UDWR ownership between the deer fence on the west and US Forest Service lands on the east.

Elk Feeding

During the late 1970's and early 1980's, elk moved onto the WMA during the winter and began competing with deer for forage. UDWR began trapping and moving elk from the Millville-Providence WMA to Hardware Ranch (typically about 50-75 elk were moved/year). The Cache Wildlife Federation (Federation) requested and received permission to feed elk on the WMA. Around the same time, UDWR purchased the Richmond WMA in northern Cache County. Portions of the Richmond WMA was planted into alfalfa hay by the Federation. The hay was subsequently cut, baled and hauled to the Millville-Providence WMA by the Federation to feed increasing numbers of elk.

During the late 1990's and early 2000's, many western states, including Utah began to be concerned about concentrating wintering animals on feed rows due to the potential for disease to spread between animals. Due to disease concerns, a shift in UDWR management goals for both property management and deer/elk management, a new policy on animal feeding, and because Federation numbers had dwindled to a handful of members capable of feeding elk, UDWR ended the elk feeding program on the MPWMA.

Facilities, Infrastructure and Encumbrances

The property supports water infrastructure for both Millville and Providence Towns. This includes spring developments and culinary water pipelines. Formal easements and special use permits need to be developed with Millville and Providence Town's for their infrastructure. There are 4 parking lots located at the entrances to all three canyons, and one in Providence Canyon. A transmission power line is located along the western boundary.

Signs are located around the WMA to identify WMA boundaries and seasonal closures. Corrals and water troughs were constructed by permittees to facilitate grazing activities. UDWR does not have any water rights on the WMA.

Key Wildlife Species:

Mule deer, elk, moose, cougar, furbearers, cottontail rabbit, small mammals, Rio Grande turkey, chukar, pheasants, mourning dove, forest grouse, neotropical migrant birds, diurnal and nocturnal raptors, and Bonneville cutthroat trout can all be found on the WMA. In addition, there are 13 Species of Greatest Conservation Need (as identified in the Utah Wildlife Plan (WAP); see Table 5).

Wildlife Action Plan Habitats

The Utah Wildlife Action Plan identifies five key habitats of statewide concern, which are found on the WMA: Mountain Sagebrush; Mountain Shrub; Aquatic Forested; Aquatic Scrub-shrub; and Riverine. One of the intents 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. Most of the threats to the key habitats are unable to be directly addressed on the MPWMA. However, management at MPWMA attempts to address threats to these habitats to the extent possible, by managing for a diverse range of habitats in various successional stages that maintain and benefit the wide variety of wildlife species found on the WMA.

Habitat Conditions and Challenges:

Overall, the winter browse condition on the WMA is considered to be in poor to fair condition. This condition is caused primarily by the dominance of annual grasses on many of the south and west facing slopes. There has been a significant reduction in habitat quality due to the loss of critical browse species (sagebrush, bitterbrush etc), primarily through fire events. Human use-related problems include illegal OHV use, illegal trail construction, encroachment from adjacent homeowners, vandalism of the deer fence and signs, and harassing big game. Adjacent land use was traditionally farmland, but has recently become highly valued for development.

Maintenance Activities

Typical annual maintenance activities occur on the WMA including maintenance on fences, gates, cattle guards, parking lots, and weed spraying. Water infrastructure and trails are maintained by the appropriate entities.

Habitat Improvement Opportunities

There have been seven Watershed Restoration Initiative habitat activities on the WMA to improve the winter browse conditions (see Table 6). Future habitat improvement plans include scalping to remove the competition from annual grass to help establish critical winter browse. Scalping was initially used on the WMA prior to 2013, and has proved to be an effective method of establishing browse on steep sites that are dominated with annual grasses or other highly competitive non-desired species. The WMA was treated again with the scalper fall of 2019 with similar results expected. Given the difficulty of effectively treating steep sites, scalping projects are planned to continue on the WMA with the goal of establishing a varied age class of browse species. In addition, outdoor recreation groups and dedicated hunting groups will continue to be used for planting potted browse species into the scalps.

Access Management

The MPWMA, with the exception of the main access roads in Providence and Millville Canyons that access USFS lands, will be annually closed to all public access during the winter months (Jan. 1 through the second Saturday in April) to protect wintering wildlife. When the property is within a hunt unit boundary where late season hunts are available, public non-motorized access to the WMA will be provided to hunters with valid hunting tags for this unit.

The property is accessible from the Millville Canyon Road, Providence Canyon Road, and Blacksmith Fork Canyon Road. Several trails are located on the WMA including the Bonneville Shoreline Trail along the “deer fence road”, and the Providence Canyon trail.

The Millville-Providence WMA, including all walking trails and areas off of the public roads, is annually closed to all public access during the winter months (Jan. 1 – opening on the second Saturday of April) to protect wintering wildlife and habitats. This closure is effective for **ALL** activities on the property, including, but not limited to: hiking; running; walking; biking; antler gathering; horse-back riding; snowmobiling; hunting; shooting; trapping; camping; picnicking; snowshoeing; cross-country skiing; and dog walking. These closure dates may be adjusted if necessary for biological or management reasons. Explicit signs have been posted at entrance locations to notify the public of this closure.

Target shooting and overnight camping are not permitted in the canyon bottoms of either Providence or Millville Canyons. This is due to yearlong high vehicle and pedestrian traffic, along with the increase in “squatters”, trash and illegal activities. This closure extends from the western WMA boundary entrance of each canyon, east to the eastern WMA boundary with the U.S. Forest Service.

Fire Management

There have been multiple wildfires on the WMA in the past 15-20 years. The Utah Division of Forestry, Fire and State Lands (FF&SL) provided UDWR with a Wildfire Risk Assessment Plan to better understand fire risk and behavior on the WMA. In addition, FF&SL recommended

several actions that could be taken to reduce this risk including:

- Improving and widening the deer fence road to accommodate fire fighting vehicles.
- Creating 30' wide buffer strips adjacent to the east side of the deer fence road to reduce fuel loads. This strip would be planted with drought tolerant, wildfire resistant grasses and forbs that provide forage value for wildlife. This strip would also provide a continuous fuel break with firefighter access between Millville and Providence Canyons.
- Remove the dense stands of juniper and other woodland plants on both sides of the Providence Canyon road from the canyon entrance, east to the WMA property boundary. This project would reduce fuels in Providence Canyon and tie in with similar Forest Service projects in upper Providence Canyon.

Livestock Grazing

Cattle grazing has been historically used on the property, and will continue using a grazing prescription designed to achieve specific goals and objectives to increase winter browse habitats. The property has been fenced into 4 different pastures to accommodate a rotational grazing program. Livestock will be limited to spring use and applied to give a growth advantage to shrubs and to reduce fire potential.

Millville-Providence Wildlife Management Area

Habitat Management Plan

May 2021

I. Background Information

Property Description

The Millville-Providence Wildlife Management Area (MPWMA) is located on the eastern foothills of Cache County, Utah, east of the cities of Providence and Millville. Private lands are located on the northern and western borders, U.S. Forest Service lands are found on the eastern border and Highway 101 is located along the southern boundary. The 3,199.82 acres of land was acquired primarily to protect big game winter habitat for deer and elk. Lands are located within all or portions of: T11N R1E Sections 11, 13, 14, 23, 25, 26, 35, 36; and T10N R1E Sections 1, 2, 11. See Appendix B for more information.

Historical Background and Context

The town of Hyrum, located near the mouth of Blacksmith Fork Canyon, was settled in 1860 by 23 pioneer families. By 1870, farming was well established in the southern areas of Cache Valley. The history of the Millville-Providence WMA is tied to the history of the settlements nearby. The “Garr Boys”, who were prominent in the ranching period of Cache Valley in 1855, established the Elkhorn Ranch in the Millville/Providence area, and helped to found the settlement of Millville. They, with other early ranchers and settlers, are closely connected with the early history of Cache Valley. The area was important in supplying flour from gristmills, and lumber from sawmills. Timber was supplied from the canyons nearby the settlements. Rock was quarried in Millville and Providence Canyons in the late 1800s’ to the early 1900s’. Millions of tons of limestone were quarried from Providence Canyon for refineries in Cache Valley, and the Pacific Northwest. The first irrigation water for Millville City was taken from the large spring on the east bench later known as the Garr Spring (this is on the WMA and water is still taken from the spring for use within Millville City). There was not sufficient water from the spring, so a canal was built from the Blacksmith Fork River to supply the settlers with water.

By 1900, unrestricted hunting by early settlers had eliminated most of the elk from their natural range in northern, central and south-central Utah. Although a hunting season was established in 1898, the only remnant Utah elk herd was in the Uinta Mountains. Interstate transplants brought 200 elk into Utah from Idaho, Montana, and Wyoming between 1912 and 1925, and elk from Yellowstone National Park were released into Logan Canyon, and near Brigham City at about the same time. Hunters from Smithfield also moved 5 elk from Montana into Smithfield Canyon during the same period. Elk populations began to increase and by 1929, small numbers of elk were being moved within Utah in an attempt to redistribute them into areas that would aid and balance the recovery. By the 1940s, the elk population in the mountains above Cache Valley had increased dramatically and numbered in the hundreds. A few hundred wintered along the benches and began causing depredation issues by eating haystacks and crops, and by interfering with the increasing dairy and agricultural activities. Mule deer were also thriving and contributing to crop depredation.

In July 1940, the Utah Department of Fish and Game (now the Utah Division of Wildlife Resources; UDWR) proposed to purchase lands on the Millville Face at the mouth of Blacksmith Fork Canyon in order to reduce crop depredation by big game in Cache Valley. *The Preliminary Project Statement* indicated:

“This area has, since colonization of the valley, been heavily grazed by livestock. After creation of the National Forests and control of grazing seasons thereon was initiated, these lands received added abuse as they were subjected to over-stocking during fall, winter, and spring months... Grazing by livestock should be prohibited if game animals are to be perpetuated in this locality... Although the State has done a great deal of supplemental feeding here for a number of years, the game herd has reached its peak and has definitely started down-hill with a heavy loss from poverty showing in the spring of 1939... With proper administration of these lands, game can again be increased without damaging results to the range... Some 2500 to 3000 deer and 400 to 500 elk are involved.”

Following the initial land purchase in 1941, subsequent acquisitions added lands to the Millville Winter Range area now known as the Millville-Providence Wildlife Management Area.

Elk Feeding

During the late 1970's and early 1980's, elk moved onto the WMA during the winter and began competing with deer for forage. UDWR began trapping and moving elk from the MPWMA to Hardware Ranch (typically about 50-75 elk were moved/year). The Cache Wildlife Federation (Federation), like many wildlife federations at the time, was very active and politically connected. They requested and received permission to feed elk on the Millville-Providence WMA. Around the same time, UDWR purchased the Richmond WMA in northern Cache County. The Richmond WMA was the first property purchased by the Rocky Mountain Elk Foundation in Utah. The Oxkiller Unit had some areas of relatively flat, level ground which was planted into alfalfa hay by the Federation. The hay was subsequently cut, baled and hauled to the Millville-Providence WMA by the Federation to feed elk. A maximum of 250 elk/year were fed. In the mid to late 1980's, the Federation requested and received permission to build a hay shed on the Millville WMA to store the hay from the Richmond WMA. The shed not been used in many years, and collapsed in a windstorm during the Summer of 2020.

During the late 1990's and early 2000's, many western states, including Utah began to be concerned about concentrating wintering animals on feed rows due to the potential for disease to spread between animals. The initial disease of concern was primarily Brucellosis, which can cause elk and cattle to abort a fetus. More recent concerns are related to Chronic Wasting Disease, a prion disease which affects the brain and spine of animals, causing death. Due to disease concerns, a shift in UDWR management goals for property management and deer/elk management, a new policy on animal feeding, and that Federation numbers had dwindled to a handful of members capable of feeding elk, UDWR ended the elk feeding program on the WMA. UDWR will follow the Emergency Big Game Winter Feeding policy (W5WLD-02).

Land Acquisition History

The majority of the Millville-Providence WMA was acquired in the early 1940's to the late 1950's from several different landowners. Due to crop depredation, a big game exclusion fence

was installed along the western boundary of UDWR ownership to prevent big game animals from accessing private agricultural fields. Additional land parcels above the deer fence were slowly acquired and/or exchanged from the 1970's until 1995 to provide a contiguous band of UDWR ownership between the deer fence on the west and US Forest Service lands on the east.

The CELCO acquisition occurred in 1995 and included a combination of a land trade of 2 MPWMA parcels (one on the south side of SR-101 and one on the west side of the deer fence) to CELCO, with UDWR acquiring 24 acres of CELCO lands located east of the deer fence. In addition, this transaction also included CELCO donating 69.32 acres east of the deer fence to UDWR. By UDWR acquiring the 93.32 acres east of the deer fence, big game winter range was protected from loss due to development, there was no additional breach of the deer fence which could have resulted in additional big game depredation in the valley, and UDWR did not have to move the deer fence to surround the new development. Portions of this CELCO land was excluded from Federal Aid encumbrance.

In 1996, a land exchange occurred between UDWR and Millville City. Millville City desired to acquire approximately 14.21 acres of land west of the deer fence, between Millville Canyon and Providence Canyon, to support culinary water infrastructure, including a water tank and pipelines. This property had lost its primary value as crucial big game winter range, as the deer fence location along the eastern boundary of the property precluded access by big game. In a value-for-value exchange, Millville City purchased 27 acres located on the east side of the Bear River, immediately south of Hwy. 142. This land was exchanged to UDWR for the property located on the west side of the deer fence. The Bear River property is now part of the Bear River Bottoms Wildlife Management Area.

In 2015, a land exchange occurred between UDWR and a private landowner. UDWR desired to obtain a 40-acre private inholding at Hardware Ranch WMA (just north of the feeding meadow), and the private landowner desired 1.45 acres of the MPWMA located adjacent to his property near SR-101 (on the west side of the deer fence). Due to the higher value of the Hardware Ranch property, UDWR provided monetary compensation to the private landowner to complete the land trade.

Date Acquired	Previous Owners & Deed Reference #	Acquisition Method	Acreage	Township, Range, Sections	Federal Aid
1941	Moses and Sara Thatcher #192343	Warranty Deed	147.49	Township 11 North, Range 1 East, Section 23	Yes
1942	G. Alfred and Amanda Anderson #195420	Warranty Deed	1831.64	Township 11 North, Range 1 East. Sections 25, 26, 35, 36 Township 10 North, Range 1 East, Sections 1, 2	Yes
1955	John and Matilda Rice #272615	Warranty Deed	158.68	Township 11 North, Range 1 East, Section 26	Yes
1955	John and Matilda Rice #273999	Quit-Claim Deed	3.98	Township 11 North, Range 1 East, Section 23	Yes
1958	Norman and Carrie Salvesen #294056	Warranty Deed	236.43	Township 10 North, Range 1 East, Section 2	Yes
1972	Elnora Nielson Strikwerda #368305	Warranty Deed	7.52	Township 11 North, Range 1 East, Section 26	Yes
1972	Utah Power & Light Company #368306	Deed	48.55	Township 10 North, Range 1 East, Sections 2, 11	Yes
1983	O. Claude Wennergren #464209	Warranty Deed	664.36	Township 11 North, Range 1 East, Section 13	Yes
1986	Valleview Estates #485240	Grant Deed	7.91	Township 11 North, Range 1 East, Section 11	No
1995	Q.B.D.B.G. LLC #626247	Special Warranty Deed	23.48	Township 11 North, Range 1 East, Section 23	Yes and No (exchange)
1995	CELCO, INC. #626248	Special Warranty Deed	69.78	Township 11 North, Range 1 East, Sections 14, 23	Yes and No (exchange land and donated land)
TOTAL			3,199.82		

Table 1. Millville-Providence WMA Acquisition History (See App. B for full legal descriptions).

Encumbrances

Minerals:

Mineral right information is available at the UDWR Salt Lake Office. In summary, the majority of the mineral rights on the property have been retained by the various grantors. Detailed information about these rights can also be found in the deeds or purchase contracts.

Water rights/shares:

The Division of Wildlife Resources does not own any water rights on the Millville-Providence Wildlife Management Area. Please see Table 2 for a listing of water rights on the WMA owned by other individuals and entities.

<u>Water Right #</u>	<u>Name</u>	<u>Flow</u>	<u>Uses</u>	<u>Source</u>	<u>Priority Date</u>
25-3037	Spring Creek Water Co.	4.6 cfs	Irrigation	Rocky Hollow Spring	12/10/1917
25-3507	Spring Creek Water Co.	16.0 cfs	Irrigation, Stockwatering	Spring Creek	5/1/1860
25-3508	South Cache Milling Company	30.0 cfs	Irrigation	Blacksmith Fork River	2/21/1922
25-4254	Hyrum Blacksmith Fork Irrigation Company	10.0 cfs	Irrigation	Blacksmith Fork River	5/1/1861
25-4255	Providence Blacksmith Fork Irrigation Company	40.0 cfs	Irrigation, Stockwatering & Domestic	Blacksmith Fork River	5/1/1861
25-4256	Providence Blacksmith Fork Irrigation Company	10.0 cfs	Irrigation, Stockwatering & Domestic	Blacksmith Fork River	5/1/1861
25-4334	USU	10.0 cfs	Irrigation, Stockwatering	Millville Canyon Creek	00/00/1897
25-4412	Hyrum City	0	Stockwatering	Blacksmith Fork River	00/00/1858
25-4413	Pacificorp	0	Stockwatering	Blacksmith Fork River	00/00/1858
25-4429	Millville Irrigation Company	40.0 cfs	Irrigation, Stockwatering & Domestic	Blacksmith Fork River	5/1/1861
25-4524	Millville Irrigation Company	10.0 cfs	Irrigation, Stockwatering & Domestic	Blacksmith Fork River	5/1/1861
25-5171	Millville City	2.0 cfs	Municipal	Well	2/16/1971
25-8394	Garr Spgs. Irrigation Co.	0.30 cfs	Municipal	Garr Spring	1/27/1978
25-8597	Kent A. Hogan	0.1 cfs	Irrigation, Domestic	Well	8/2/1984
25-9059	CELCO Inc.	.0670 cfs	Irrigation, Stockwatering & Domestic	Well	5/4/1990

Table 2. Water Rights on the Millville-Providence Wildlife Management Area.

Easements/ROWs/MOUs:

A full summary of all easements, ROW's and MOU's can be reviewed in UDWR's Salt Lake office. The following easements currently have the greatest impact on land management activities.

Cache Big Game Control (Wildlife Exclusion) Fence

The 8' tall, "V"-mesh big game exclusion fence is approximately 37,850.30 ft. (7.16 miles) long and runs between Blacksmith Fork Canyon to an approximate area north of Providence canyon. The fence was constructed from 1948 to 1951 (Federal Aid #W-47-D) to prevent deer and elk depredation of private farms and orchards. It was constructed along the lower slope of the WMA and followed logical terrain features to an approximate area north of Providence Canyon. Nine landowners originally signed the fence agreement in 1948, and two other landowners later entered the agreement, which granted ROW easements to the Utah Department of Fish and Game (now UDWR). Each landowner has an individual easement with the UDWR. Over the subsequent years, the fence was extended by other entities, and now extends north to Logan Canyon. However, there are multiple gates in various states of effectiveness in keeping animals on the east side of the fence.

In 1948, the Fish and Game Department created and signed a perpetual fence agreement with William Rice, George Bankhead, Arthur Checketts, Joseph Baer, Al Baer, Marion Chugg, Joe Rinderknecht, Hyrum Gibbons, and George Kendrick to build, patrol and maintain a deer fence for the purpose of protecting the parties from trespass by deer and elk. This agreement was Certified by Utah's Attorney General in 1953, and recorded in Cache County on March 28th, 1990, Entry 531461, Book 468, page 562.

Elnora Nielson entered into the fence agreement in December 1948. The new signature on the agreement was not recorded with Cache County. In 1951, Nielson granted the Utah Department of Fish and Game a 16 ½ ft. wide right-of-way easement across Section 26, T11N, R1E, SLB&M, to build, replace, maintain, repair, or alter the Cache Big Game Drift Fence, and maintain the roadway adjacent to the fence. The center line of the easement runs with the fence. The document was recorded in Cache County, Utah in 1990, Entry 531464, Book 468, page 563.

Norman H. Salvesen entered into the fence agreement on January 15th, 1949. The new signature on the agreement was not recorded with Cache County. In 1952, Salvesen granted the Department of Fish and Game a 16 ½ wide right-of-way easement across Section 2, T10N, R1E, SLB&M, to build, replace, maintain, repair, or alter the Cache Big Game Drift Fence, and maintain the roadway adjacent to the fence. The center line of the easement runs with the fence. The document was recorded in Cache County, Utah in 1990, Entry 531463, Book 468, page 565.

During the Summer of 1959, an intense and concentrated rainstorm caused mud-rock flows on the hillsides between Millville Canyon and Dry Canyon. The fence was destroyed in 18 places as a result of this storm event. In addition, a boulder went through another section of fence. Hunters cut holes in the fence to create additional access points. The fence was repaired.

In 1983, the entire fence was evaluated to identify holes in the fence, and the fence was fixed. The road from Providence canyon to River Heights was closed due to heavy fence destruction. Cattleguards were added in Millville and Providence Canyons to keep deer and elk from getting below the fence.

In 1984, UDWR hired a contractor to maintain the fence due to the large workload necessary to maintain the fence. J.C. Construction and Tile was contracted (Contract # 84-5221) to repair and maintain the entire 8 miles of deer fence between Blacksmith Fork Canyon and Logan Canyon.

In 1987, a three-year fence maintenance contract (87-2460) was developed with the Cache Valley Wildlife Federation. UDWR would furnish materials and the Federation would do the labor, and provide the necessary equipment, tools and machinery. In 1989, this contract was amended to increase the contract amount, thereby extending the life of the contract. The contract also clarified that no work would be initiated without prior approval of the area conservation officer, and that billing must be submitted within 2 weeks of the actual work.



Picture 1. Millville-Providence WMA Big Game fence and Administrative Road/Trail. Photo taken facing south.

American Telephone & Telegraph Company of WY: In 1971, the American Telephone & Telegraph Company acquired a perpetual ROW easement for a 20 ft. wide buried cable found in Section 2, T10N, R1E, and Section 7 T10, R2E, SLB&M containing 1.38 acres. The document was recorded in Cache County, Utah in 1971: Contract# 5328, Book 132, page 683. This easement also includes sections of Hardware Ranch.

U.S. Forest Service (Contract# 20052). In 1973, the Forest Service acquired a perpetual ROW easement for a 66 ft. (33 ft. off both sides of the centerline) roadway along the Millville Canyon road in Section 26 T11N, R1E, SLB&M, containing 3.81 acres, and extending 2,517.20 feet. One of the reservations made by UDWR was the right to annually lock the

gate across the road, from December 1 through March 31. The document easement was recorded in Cache County, Utah. Currently the gate remains open providing access to the canyon bottom. If winter use increases to a point that it is detrimental to wildlife, the option of seasonally closing and locking the gate will be explored.

Utah Power & Light Company: In 1980, UDWR granted a perpetual easement to Utah Power & Light Company (Contract #81-5138). This easement allows for the construction and maintenance of a power line with a 60' wide ROW (30' either side of centerline) making up 0.173 acre in Section 23, T11N, R1E. UDWR recommended a wildlife beneficial seed mixture to seed all disturbed lands.

Rocky Mountain Power has taken over operations and maintenance of the powerline and associated infrastructure on the WMA. Periodic maintenance includes cutting of vegetation below the power lines and around the poles to reduce possible impacts from fire to power transmission.

Millville Water System: In 1980, UDWR provided Millville City a letter regarding the Millville Water System. This letter was needed in order to meet the Utah Health Department requirements. The letter indicates that UDWR does not have the intent to locate or permit concentrated sources of pollution within the protection zone around the Garr Spring area. Prohibited sources of pollution include septic tanks, drain fields, garbage dumps, drain lines, sewer lines, corrals, etc.

Millville Culinary Water Feeder Line: In 1991, UDWR issued Millville City an Agreement for a 20' ROW for the construction, operation, maintenance and inspection of a culinary water feeder line and appurtenant structures (SE1/4 of Section 23, T11N, R1E). No activities are permitted to occur from Nov. 1 – April 15, without prior written consent of UDWR. This Agreement expires 30 years after the date of signing (in 2021). A new easement needs to be issued to Millville City for this water infrastructure.

The infrastructure consists of 1335.54 feet of road access that is 20 ft. wide, and includes a reasonable right to ingress and egress over and upon the described land for construction and maintenance of the pipeline. Millville City agreed to improve road conditions along the fence, and that all fences and gates must be restored to original condition. Millville is also responsible for ensuring minimal disturbance to the land, and to revegetate disturbed areas.

Garr Spring

Garr Spring is a large spring on the bench east of Millville City which was originally developed sometime during the 1800's. It is owned by the Garr Springs Irrigation Company with Millville City holding 27.42 water shares (out of 225 shares) which they use for culinary water. Garr Springs water rights were appropriated in 1860. During the winter, the City has access to 100% of the water. In 1997, UDWR granted Millville City's request to enter the WMA to make improvements to the Garr Spring area in order to meet state and local health standards and maintain use of the water for culinary uses. As this spring was developed long before UDWR acquisition of the land, no easement exists with UDWR to document existing infrastructure on the WMA. UDWR will pursue an easement with the Garr Springs Irrigation Company to document all existing infrastructure on the WMA and provide a mechanism for future improvements.

The Garr Spring water system infrastructure on DWR property includes: a concrete junction and collection box; a 6' high fence that surrounds the water system; overflow outlets that drain into a ditch; and a 12" diameter buried PVC pipe running west from the spring, and crossing under the Big Game fence to Millville's 300,000-gallon water storage reservoir. A wildlife water trough and waterline have been installed immediately north and adjacent to the fence surrounding Garr Spring, to provide wildlife and livestock with water during the summer months. This water system is found in the northern part of SW/4 Section 23 T11N, R1E, SLM&B. The wildlife water trough, is currently in a substantially degraded condition and no longer holds water for wildlife. However, overflow from the Garr Spring collection system flows outside the fenced spring area and becomes available to wildlife before heading into a culvert under the road and then under the 8' tall wildlife exclusion fence. If this water becomes unavailable to wildlife in the future, UDWR would request that Millville City replace and upgrade the water trough and water line to provide water for wildlife and livestock.



Picture 2. Garr Spring. Photo taken facing east.



Picture 3. Garr Spring with UDWR trough. Photo taken facing southeast.

Bonneville Shoreline Trail (Millville-Providence WMA) and Blacksmith Fork Canyon Trail:

This is a 2016 License Agreement with Cache County (Division # CACH-1603LI-0602; 702127) for the construction of two recreational trails: the Blacksmith Fork River Trail (1.8 miles; on UDWR property, but not on this WMA), which will run along an existing water pipeline on the southern side of the Blacksmith Fork River; and a segment of the Bonneville Shoreline Trail (2.75 miles), which will run along an existing, unimproved access road that follows the western border of Millville-Providence WMA (along the deer fence). The Bonneville Shoreline trail segment was constructed and will be maintained by the Utah Conservation Corps (UCC). It is approximately ten feet wide and safe for use by UDWR vehicles. The Blacksmith Fork River Trail will be constructed by the UCC and maintained by Hyrum City, in conjunction with Cache County. It is planned to be between three and five feet wide for the use of foot and off road bicycle traffic. The two trails will connect at the UDWR parking area on SR101 (located at the southwest corner of the MPWMA).

Providence Trail:

This is a 2010 License Agreement between Cache County and UDWR (Division # CAC-1005LI-145 70 1419) regarding the construction of a non-motorized recreational trail in Providence Canyon. Construction is to be completed by the Utah Conservation Corps (UCC) and maintenance is to be completed by Cache County. The 24" wide, approximately 0.9-mile trail is located above the Providence creek south river bank from the mouth of Providence Canyon, until it connects further east to a section of a trail that the Uinta-Wasatch-Cache National Forest, Logan Ranger District, has constructed. This trail was recently completed.

Providence City:

In 1983, just prior to UDWR's acquisition of this land parcel, the prior landowner deeded Providence City a 1-acre parcel for a utility easement, together with a 16.50 ft. ROW for the construction and maintenance of a water pipeline and feeder lines from the easement to the Providence City Reservoir site (Section 13 T11N, R1E, SLM&B) located on City property. The document was filed in Cache County on 8/22/1983 as Entry# 462122, Book 321, page 243.

In November 1998, UDWR provided permission to Providence City for a “special use permit” for a 1-acre parking lot about ¾ mile up from the mouth of Providence Canyon, just east of the City’s water tank. This was needed to reduce the occurrences of illegal parking in the area, and to support non-motorized public access to the Bonneville Shoreline Trail and the Providence Canyon Trail. No public access is allowed outside of the main access road in the bottom of the canyon during the regular WMA winter closure period to protect wintering wildlife. Providence City agreed to patrol and enforce activities in the canyon area. The parking lot is currently maintained by Providence City Public Works. No formal Special Use Permit was issued for this parking lot. A Special Use Permit needs to be secured.

In July 1999, UDWR approved Providence City’s request to place 2-3 picnic tables in the vicinity of the parking area in Providence Canyon. Stipulations included that the picnic tables will be available to the public free of charge and the City would build and maintain the tables in a manner acceptable to UDWR. This request became part of the UDWR and Providence City “agreement” of November 17, 1998. This information should be added into the Special Use Permit to be secured in the future.

Grazing:

Prior to UDWR ownership, the past grazing history of the property is unknown, but is suspected to have included frequent grazing on the lower bench slopes.

In 1986, the lower elevation benches of the WMA between Blacksmith Fork Canyon and Millville Canyon (approx. 500 acres) were evaluated for possible grazing beginning on a one-year trial basis. Vegetation production was estimated at 400 lbs/acre which indicated approximately 100 AUM’s could utilize the area for spring grazing. The Millville Cattle Association grazed the property beginning in 1988, in concert with their U.S. Forest Service Millville Canyon grazing allotment. UDWR anticipated a grazing pattern of 2 years of grazing, with 1 year of rest. Forage production was estimated at 693 lbs/acre in 1989 and 1200 lbs/acre in 1990. The property was rested during 1991 and 1992 with formal grazing bids requested in 1993 for 131 AUM’s.

In 2018, Millville Cattle Association had a grazing permit for the WMA for 88 AUM’s. There are currently 2 grazed pastures south of Millville Canyon, splitting the south half of the WMA in half. Please see the map in Appendix A for more information.

Currently, the MPWMA contains 4 grazing pastures. The two southern pastures are located between Millville and Blacksmith Fork canyons, and the two northern pastures are located between Providence and Millville canyons. The two northern pastures have not been utilized in several years and will be grazed during the summer of 2020. The southern pastures have greater amounts of forage available and a less severe aspect allowing for more area to be utilized. Consequently, the southern pastures are capable of being grazed for a longer period of time. This southern pasture is being rested for a few years to allow recent habitat restoration seeding efforts to become established.

The southern pastures are grazed from May 1 - June 30 with the cattle spending approximately 30 days per pasture. The northern pasture is grazed from May 15 - June 15 with the cattle spending approximately 15 days per pasture. During grazing, the pastures are stocked at a rate of 88 AUMs for the grazing period. Both north and south sides contain 2 permanent watering points, one in each pasture. The permittee holder provides in-kind labor in lieu of payment. Their in-kind work includes fence maintenance & repair, fence replacement as necessary, watering point maintenance and improvement, and regular riding to insure grazing objectives are being met.

In the 1960's, UDWR secured a grazing lease on Utah State Division of Lands (now SITLA; the Utah School and Institutional Trust Lands Administration) land located in T 11 North, R 2 East, Section 32. This land is east of and not adjacent to the WMA. In 1969, UDWR signed an MOU with the U.S. Forest Service to allow them to administer grazing on this Utah State Division of Lands land in concert with their grazing program and the Millville Canyon grazing allotment.

In 1973, UDWR secured a 10-year term grazing lease on Utah State Division of Lands (grazing lease #19980, 565.68 acres) located in T 11 North, R 2 East, Section 32. In 1976, UDWR and the USFS signed another MOU wherein UDWR allowed the USFS to administer the Utah State Division of Lands land within the Millville Cattle Association grazing allotment. This agreement was renewed in June 1984, and expired in Jan. 1993. It was never renewed.

Grazing on WMA's is identified in the UDWR Use of Division Lands Rule (R657-28). Cattle grazing will be done using a grazing prescription designed to achieve specific goals and objectives. Grazing will be annually evaluated based on present range conditions, habitat projects, and the need to meet wildlife goals.

Conservation Partners Involved with Purchase:

Roughly 98% of the MPWMA was acquired using monies from the U.S. Fish and Wildlife Service, Wildlife and Sportfish Restoration (Federal Aid) grant program: Millville Game Winter Range Proposal project numbers W-12-L-1, W-12-L-7, W-12-L-9. The grant proposals described that the land would be used to insure the existence of big game herds in the Cache Valley area. The land would allow hunting, and provide forage for deer, elk, and a newly expanding moose herd.

Purpose of Division Ownership

The MPWMA was acquired for the purposes of preserving big game winter range, protecting wintering wildlife species from disturbance, and reducing deer and elk depredation on surrounding private properties. With roughly 41% of mule deer winter range and 32% of elk winter range in Wildlife Management Unit 2 being privately owned (See Tables 3 and 4), the WMA protects crucial deer and elk winter ranges. Currently, many of the private properties north, south and west of the MPWMA are rapidly developing into residential properties.

Unit 2 Mule Deer Habitat	Yearlong range		Summer Range		Winter Range	
Ownership	Area (acres)	%	Area (acres)	%	Area (acres)	%
Forest Service	0	0%	273,346	55%	52,358	16%
Bureau of Land Management	845	<1%	46,126	9%	94,909	29%
Utah State Institutional Trust Lands	245	<1%	25,001	5%	28,933	9%
Private	104,662	99%	146,362	30%	133,488	41%
Utah State Parks	0	0%	0	0%	17	<1%
Utah Division of Wildlife Resources	81	<1%	4,552	1%	11,823	4%
TOTAL	105,833	100%	495,387	100%	321,528	100%

Table 3. Unit 2 Mule Deer Habitat Land Ownership (from “Deer Herd Unit Management Plan, Deer Herd Unit #2 (Cache), October 2017).

Unit 2 Elk Habitat	Yearlong range		Summer Range		Winter Range	
Ownership	Area (acres)	%	Area (acres)	%	Area (acres)	%
Forest Service	5,701	25	202,884	65	116,462	32
Bureau of Land Management	0	0	16,627	5	97,367	27
Utah State Institutional Trust Lands	0	0	13,432	4	18,929	5
Private	16,043	72	78,415	25	118,553	32
Utah Division of Wildlife Resources	629	3	1,187	<1	14,972	4
TOTAL	22,374	100%	312,544	100%	366,283	100%

Table 4. Unit 2 Elk Habitat Land Ownership (from “Elk Herd Unit Management Plan, Elk Herd Unit #2 (Cache), June 2016).

The MPWMA also provides recreational opportunities that are consistent with and support the property’s wildlife values. Primary recreation opportunities are upland game and big game hunting in the fall, and turkey hunting and shed antler gathering in the spring. Horseback riding, hiking, and camping are also popular uses of the MPWMA.

Key Wildlife Species occurring on the WMA

Big Game

The south and west facing slopes, and associated ridges, of the Millville-Providence WMA provide crucial winter habitat for mule deer (*Odocoileus hemionus*), and elk (*Cervus canadensis*). Moose (*Alces alces*) can occasionally be found along the Blacksmith Fork River.

Beginning in the winter of 1983/84, the Cache Wildlife Federation began an elk feeding program to reduce depredation on surrounding private lands. As many as 325 elk could be observed feeding on

the WMA at any one time, along with high numbers of deer. This feeding program continued until 2010. Recent warmer winters in northern Utah have reduced the need to feed elk. UDWR is currently reviewing all big game feeding efforts due to concerns associated with wildlife disease transmission and habitat degradation.

Upland Game

The WMA has diverse upland habitats of grasses, shrub, riparian habitats and mountain brush communities that support a number of upland game species including: cottontail rabbit (*Sylvilagus nuttalli*); ringneck pheasant (*Phasianus colchicus*); dusky grouse (*Dendragapus obscurus*); ruffed grouse (*Bonasa umbellus*); Rio Grande turkey (*Meleagris gallopavo intermedia*); chukar (*Alectoris chukar*); and mourning dove (*Zenaida macroura*). Hungarian partridge (*Perdix perdix*) and California quail (*Callipepla californica*) possibly inhabit the area as well. The North American beaver (*Castor canadensis*) can also be found in the Blacksmith Fork River.

Carnivores

Cougar (*Puma concolor*), coyote (*Canis latrans*), red fox (*Vulpes vulpes*), long tailed weasel (*Mustela frenata*), bobcat (*Lynx rufus*), striped skunk (*Mephitis mephitis*), American mink (*Mustela vison*), and raccoon (*Procyon lotor*) can be found in appropriate habitats on the WMA.

Non-Game Birds

Numerous non-game bird species can be found on the WMA, with several being included in the Utah Wildlife Action Plan as a Species of Greatest Conservation Concern (Table 5). These species include: the Bald eagle (*Haliaeetus leucocephalus*); the Golden Eagle (*Aquila chrysaetos*); the Lewis' woodpecker (*Melanerpes lewis*); and the Northern pygmy owl (*Glaucidium gnoma*). Additional species include a wide suite of migratory songbirds which breed and nest on the WMA, such as warblers, sparrows, chickadees, swallows, nuthatches, etc... A detailed non-game bird survey or inventory has not been completed on the WMA.

Non-Game Mammals

Numerous non-game mammal species may be found on the WMA, with several being included in the Utah Wildlife Action Plan as a Species of Greatest Conservation Concern (Table 5). These species include: the Little brown myotis (*Myotis lucifugus*); the Townsend's big-eared bat (*Corynorhinus townsendii*); and the Fringed myotis (*Myotis thysanodes*). A detailed non-game mammal survey or inventory has not been completed on the WMA.

Amphibians

The aquatic resources on the WMA, such as springs, wetlands, riparian habitats and streams, provide potential habitat for amphibians. Although a detailed amphibian survey or inventory has not been completed, the various habitats found on the WMA may support the following species: Boreal Chorus Frog (*Pseudacris maculate*) and Tiger Salamander (*Ambystoma tigrinum*). In addition, there are two amphibian species with the potential to occur on the WMA, which are included in the Utah Wildlife Action Plan as a Species of Greatest Conservation Concern (Table 5). These include: the Northern Leopard Frog (*Lithobates pipens*) and the Western (Boreal) Toad (*Anaxyrus boreas*).

Reptiles

Although a detailed reptile survey or inventory has not been completed, the various habitats found on the WMA may support the following species: Rubber Boa (*Charina bottae*); Northern Sagebrush Lizard (*Sceloporus graciosus*); Western Yellowbellied Racer (*Coluber constrictor mormon*); Great Basin Rattlesnake (*Crotalus oreganus lutosus*); Great basin Gopher Snake (*Pituophis catenifer deserticola*); Valley Garter Snake (*Thamnophis sirtalis fitchi*); and Wandering Garter Snake (*Thamnophis elegans*).

Fish

There are three flowing streams on the WMA: The Blacksmith Fork River, Millville Canyon Creek and Spring Creek (in Providence Canyon). The Blacksmith Fork River has been surveyed for fish species with the river potentially supporting a variety of native and non-native fish species including: Utah Chub (*Gila atraria*); Longnose Dace (*Rhinichthys cataractae*); Speckled Dace (*Rhinichthys osculus*); Mottled Sculpin (*Cottus bairdii*); Redside Shiner (*Richardsonius balteatus*); Mountain Sucker (*Catostomus platyrhynchus*); Utah Sucker (*Catostomus ardens*); and Mountain Whitefish (*Prosopium williamsoni*). The Blacksmith Fork River also supports Bonneville cutthroat trout (BCT) (*Oncorhynchus clarki utah*) which is identified in the Utah Wildlife Action Plan as a Species of Greatest Conservation Concern (Table 5).

Neither Millville Creek nor Spring Creek have been surveyed for the presence of fish. The cold water fisheries in both of these creeks are constrained by low flows in late summer, and a viable, self-sustaining, year-round fishery is unavailable in these waters. In 2015, the U.S. Uinta-Wasatch-Cache National Forest surveyed these creeks on Forest lands east of the WMA. Millville Creek was fishless, and Spring Creek supported brown trout (*Salmo trutta*).

Mollusks

A detailed survey or inventory for mollusks has not been completed on the WMA. However, the habitat on the WMA may support mollusk species, with several being included in the Utah Wildlife Action Plan as a Species of Greatest Conservation Concern (Table 5). Possible mollusks which may occur on the WMA include: Creeping Ancyloid (*Ferrissia rivularis*); Lance Aplexa (*Aplexa elongate*); Rocky Mountain Dusksnail (*Colligyrus greggi*); Flexed Gyro (*Gyraulus deflectus*); Swamp Lymnaea (*Lymnaea stagnalis*); Deseret Mountainsnail (*Oreohelix peripherica*); Lyrate Mountainsnail (*Oreohelix haydeni haydeni*); Green River Pebblesnail (*Fluminicola coloradoensis*); Glossy Pillar (*Cochlicopa lubrica*); Marsh Rams-horn (*Planorbella trivolvus*); Toquerville Springsnail (*Pyrgulopsis kolobensis*); and Button Sprite (*Menetus opercularis*).

Species of Greatest Conservation Need

On the WMA, there are thirteen wildlife species which are identified as a Species of Greatest Conservation Need (SGCN; from the 2015 -2025 Wildlife Action Plan). The SGCN species were identified through a multi-stakeholder effort to identify those species most in need of conservation due to various threats affecting species habitats. Table 5 includes SGCN species that have been either observed on the WMA, or would be expected to occur given habitat types present on the WMA. Other than surveys completed for Bonneville Cutthroat Trout in the Blacksmith Fork River, no species surveys for either terrestrial or aquatic wildlife have been completed elsewhere on the WMA.

Species	Scientific Name
Bald eagle	<i>Haliaeetus leucocephalus</i>
Golden eagle	<i>Aquila chrysaetos</i>
Lewis' woodpecker	<i>Melanerpes lewis</i>
Northern pygmy owl	<i>Glaucidium gnoma</i>
Townsend's big-eared bat	<i>Corynorhinus townsendii</i>
Little brown myotis	<i>Myotis lucifugus</i>
Fringed myotis	<i>Myotis thysanodes</i>
Bonneville cutthroat trout*	<i>Oncorhynchus clarkii utah</i>
Boreal (Western) Toad	<i>Anaxyrus Boreas</i>
Northern leopard frog	<i>Lithobates pipiens</i>
Deseret Mountainsnail	<i>Oreohelix peripherica</i>
Lyrate Mountainsnail	<i>Oreohelix haydeni haydeni</i>
Green River Pebblesnail	<i>Fluminicola coloradoensis</i>

Table 5. Species on Millville-Providence Wildlife Management Area identified as Utah Species of Greatest Conservation Need (SGCN) from the Utah Wildlife Action Plan (2015-2025). A (*) designates a Conservation Agreement Species.

Public recreation opportunities/Access

The property experiences heavy use from Cache County residents. Depending on the appropriate season, the major public recreation opportunities on the property include hunting for big game and upland game, fishing, hiking, horseback riding and shed antler hunting/gathering. Other opportunities include camping and wildlife viewing. The Providence and Millville Canyon dirt roads are open for motorized vehicle use year round. Both of these canyons provide public access to Forest Service land on the eastern boundary of MPWMA.

In 1998, UDWR granted Providence City permission for a 1-acre parking lot at the bottom of Providence Canyon, just east of the City's water tank. This was needed to reduce the occurrences of illegal parking in the area, and to support non-motorized public access to the Bonneville Shoreline Trail and the Providence Canyon Trail. A formal MOU between UDWR and Providence City needs to be developed to authorize the operation and maintenance of this parking lot.

UDWR granted a license agreement to Cache County in 2010 to construct a non-motorized trail in Providence Canyon to reduce the potential for accidents between motorized and non-motorized traffic. Unauthorized creation and use of off-road routes has been a concern with the heavy use of this canyon. Boulder barriers and buck pole fencing has been used to close off access to the problem areas.

The administrative road that runs along the big game fence remains closed to all public vehicle use. UDWR granted a license agreement to Cache County in 2016 to construct and improve a segment of the Bonneville Shoreline Trail (2.75 miles), which incorporates portions of the existing, unimproved access road that partially follows the big game fence along western border of Millville-Providence WMA. This trail segment begins at the UDWR parking lot on SR-101 (located at the southwest corner of the WMA), and runs north on the bench along the fence

above Hyrum and Millville towns. It is approximately 10' wide, will be maintained by the Utah Conservation Corps (UCC), and accessible by UDWR vehicles.

The Millville-Providence WMA, including all walking trails and areas off of the public roads, is annually closed to all public access during the winter months (Jan. 1 – opening on the second Saturday of April) to protect wintering wildlife and habitats. This closure is effective for **ALL** activities on the property, including, but not limited to: hiking; running; walking; biking; antler gathering; horse-back riding; snowmobiling; hunting; shooting; trapping; camping; picnicking; snowshoeing; cross-country skiing; and dog walking. These closure dates may be adjusted if necessary for biological or management reasons. Explicit signs have been posted at entrance locations to notify the public of this closure.

Target shooting and overnight camping are not permitted in the canyon bottoms of either Providence or Millville Canyons. This has become a public safety issue due to yearlong high vehicle and pedestrian traffic on the roads and trails, along with the increase in long-term encampments, trash and illegal activities. This closure extends from the western WMA boundary entrance of each canyon, east to the eastern WMA boundary with the U.S. Forest Service: Providence Canyon = 1 mile; Millville Canyon = ½ mile.

Outside of the canyon bottoms, as per UDWR Administrative Land Use Rule (R657-28), camping is permitted on the WMA for 14 consecutive days. However, if resource damage occurs, the camping limit may be restricted and/or the area may be closed to camping.

All activities on the WMA will be considered according to the UDWR Administrative Land Rule (R657-28). In general, activities that do not support the purpose for which the WMA was acquired, or activities which do not promote or protect the goals and objectives of the unit, will be prohibited. This specifically applies to those activities that disturb or harass wildlife, or degrade important habitats.

II. Property Inventory

Existing Capital Improvements

Fences

- The 8' tall, "V"-mesh big game exclusion fence is approximately 37,850.30 ft. (7.16 miles) long and runs between Blacksmith Fork Canyon and Logan Canyon. The portion of fence on the MPWMA was installed in the 1950's, and is approximately 5.50-5.75 miles long. The fence needs continual maintenance. The Cache Wildlife Federation is no longer available to undertake this maintenance as they have in the past, so UDWR is performing all maintenance. The livestock grazers also help maintain the integrity of the fence. There have been questions on whether the fence has outlived its usefulness due to holes that are constantly being cut into it, which allow deer to pass through, or that much of the cropland that the fence was meant to exclude big game from has been developed into houses. However, there have not been many recent complaints about deer on private property just west of the fence.

The eastern boundary of the WMA is not fenced as it abuts the United States Forest Service lands. In addition to the big game exclusion fence, there are several additional sections of fence on the WMA. These include:

- Approximately 0.5-mile of buck and pole wooden fencing along both sides of the Millville Canyon road, extending from the deer fence on the west to the property boundary on the east.
- Approximately 0.25-mile buck and pole wooden fencing around the Blacksmith Fork parking area to protect the spring area. This wooden fencing extends approximately 350 yards east, up Blacksmith Fork Canyon, ending at a convenient topographical location, west of the property corner. This wooden fencing up Blacksmith Fork Canyon has a let-down fence immediately adjacent and parallel to it to keep livestock from getting through the fence.
- Millville City has a 689 ft. perimeter chain-link fence that surrounds their water collection system on Garr Spring.
- Approximately 0.25 miles of wood fencing in located in Providence Canyon to exclude OHVs from the riparian corridor.

Gates

There are numerous vehicle and livestock gates, and pedestrian gates and walk-through's located throughout the property. At this time, there is not an accurate accounting of all these gates. Repairs are made as needed.

Facilities

A large hay shed was built approximately 25-30 years ago to store hay for feeding elk on the WMA in the winter. The shed was approximately 30' wide x 50' long x 15' tall, with 7' tall side walls and could hold approximately 800, 50-pound hay bales. The shed has not been utilized since 2010 when UDWR stopped winter-feeding of big game animals on the WMA. The shed had fallen into disrepair and collapsed during a windstorm in the summer of 2020. It is scheduled for removal during 2021.



Pictures 4a and 4b. Millville-Providence WMA hay barn (Oct. 2018 and Oct. 2020).

Signs

There are 2 large WMA entrance signs located at the mouth of Millville Canyon and at the Blacksmith Fork day use area trailhead. There is no formal entrance sign in Providence Canyon. Providence Canyon has also been posted with signs from the City and other agencies regarding ATV use and fire restrictions. There are also a number of regulatory signs on the property posting the closure dates and permitted activities during the winter months. Both Millville and Providence Canyons have many recreation concerns with the public wanting to use the canyons throughout the winter for a variety of uses. While the canyon bottoms are open for public and vehicle access, lands outside of the canyon bottoms are annually closed to all public access from Jan. 1 – second Saturday in April. A new entrance signs will be posted at the Providence Canyon entrance.

Kiosks

There are two kiosks located on the WMA: one at the Blacksmith Fork Canyon day-use area and the second at the Millville Canyon entrance

Roads

There are two paved roads that provide public access to Millville and Providence Canyons respectively, with both of these roads transitioning into gravel roads upon entering the WMA. There are also a few unpaved roads that are used for authorized vehicles including: a road that runs approximately north-south along the deer fence; a short road, approximately 25 yards, that leads to the hay shed; a 0.39 mile utility road that leads south from Millville Canyon Road to the power lines; a ¼ mile long road from the deer fence north of Blacksmith Fork canyon, east to the upper lake terrace for maintenance and habitat restoration activities; and a short spur road servicing the Millville City Garr spring area. In addition, both canyons have OHV spur roads usually associated with “hill climbs”, along with webs of “two-tracks” associated with dispersed camping activities. Providence Canyon also supports more dispersed “tracks” from previous target shooting and paintball activities.

Cattleguards

There is one cattleguard located at the mouth of Millville Canyon. It has filled with dirt and will be evaluated for replacement to prevent cattle from leaving the WMA.

Parking Lots

There are four parking areas.

- A small parking area is located at the mouth of Blacksmith Fork Canyon along SR-101 (Blacksmith Fork highway), to provide walk-in access to the south boundary of MWMA.
- A 1-acre parking lot at the mouth of Millville Canyon. This parking area is split by the big game fence, so vehicles can park on either private property (west side of fence), or UDWR property (east side of fence).
- A 0.5-acre parking lot is located at the bottom of Providence Canyon.
- A 1-acre parking area is located approximately ¾ of a mile up Providence Canyon as a snowmobile parking area, and for non-motorized public access to

the Bonneville Shoreline and Providence Canyon trails. UDWR approved Providence City to create and maintain this parking lot. However, there is no signed easement for this parking lot.

Snowmobile Garage

There is a garage for snow grooming machines owned by a private individual. This individual also grooms the dirt road in the winter to facilitate snowmobile access. This building is adjacent to the livestock corral and parking area, approximately ¾ mile up the canyon. The building owner has informed UDWR that the building is no longer used and will be removed in Summer 2021.

Livestock Corrals

There are 2 livestock corrals located on the WMA. One corral is located about ¾ mile up from the mouth of Providence Canyon, and is adjacent to the parking lot and Providence City garage. This corral is used to collect livestock moving off from the adjacent USFS lands. The corral is located approximately 430 yards west from the WMA eastern property boundary, in a convenient area to collect livestock with room for large livestock trailers to have easy access. The second corral is located at the mouth of Millville Canyon, on the south side of the entrance road. This corral is used to collect animals that have grazed the WMA lands.

Water developments

UDWR maintains 3 livestock troughs. However, there are several developments on the WMA owned by other entities, each of which has an easement granted by UDWR. See section on “Easements” earlier in this plan for more details.

- Millville has a culinary water collection system on the western boundary of the WMA.
- Garr Springs Irrigation Company, in association with Millville City, maintains the Garr Spring area including fence, spur road and other infrastructure.
- Providence City has a water tank and feeder lines located ¾ mile up Providence Canyon.
- There are three livestock water troughs and one livestock water access site on the WMA to facilitate livestock grazing. Please see the map in Appendix B.
 - One trough is located along the Big Game fence, near Providence Canyon, southwest from the entrance gate at Providence Canyon Road.
 - One trough is located immediately north of the fence surrounding Garr Spring. This is east of the Big Game fence, between Millville and Providence Canyons.
 - One trough is located along the Big Game fence south of Millville Canyon.
 - On the south end of the WMA, the Blacksmith Fork river backs up under the Big Game fence, with the water used by livestock.

Water rights

The Division of Wildlife Resources does not have any water rights on the WMA.

Water Resources

There are 3 sources of perennial lotic water on the WMA: The Blacksmith Fork river, Spring creek (Providence Canyon), and Millville Canyon creek. There are at least 2 springs on the west and south facing bench areas which provide water for wildlife. These include: Garr Spring (developed, but overflow waters are available for wildlife); and the spring adjacent to the UDWR parking lot at the mouth of Blacksmith Fork canyon.

Wood products

Forestry resources are very limited, with the WMA supporting some juniper, and trees associated with riparian areas, but no harvestable timber resources.

Cultural Resources

Approximately 267 acres of the WMA have been surveyed for cultural resources. Three cultural resource inventories have occurred related to habitat restoration, fire break creation, and emergency stabilization projects. No cultural resources have been documented. The steep vertical face of the Millville-Providence WMA and heavy vegetative cover are most likely why cultural resources have not been found within the boundaries of the WMA. A single broken disk was encountered during one of the cultural resource surveys pointing to the history of soil disturbance from past habitat projects implemented along the flatter, lower elevation areas of the WMA.

Important Fish and Wildlife Habitats

The south and west facing slopes and associated ridges of the WMA provide critical winter habitat for big game. The range is considered to be in fair to poor condition, primarily due to the dominance of cheatgrass, bulbous bluegrass, and other annual grasses and weeds on many of the south and west facing slopes. UDWR has undertaken a wide variety of habitat enhancement activities over the past 25+ years, with limited success. This limited success is due in part to the hot, dry slopes which quickly lose moisture, and to the increased occurrence of fires (both lightning and man-caused).



Picture 5. Millville-Providence WMA (2007). Picture taken facing north.

Wildlife Action Plan Habitats (2015-2025)

The Utah Wildlife Action Plan (WAP) (See additional information in Section III, Management Goals and Objectives), identifies two key terrestrial habitats and three key aquatic habitats that occur on the MPWMA. The WAP identifies habitats of conservation concern which were identified using the following criteria: the percentage of the habitat type within Utah; the number of SGCN species in the habitat; wildlife diversity; the threats to that habitat type; and the value to humans. Habitat Condition is also assessed by identifying the quantity and intensity of threats facing each habitat type, and then ranks the impact of that threat (the scope and severity or S&S) according to the number of Species of Greatest Conservation Need that could be affected from that threat.

- **Mountain Sagebrush habitat:** Mountain sagebrush habitats on MPWMA are susceptible to invasion by non-native annual grasses (mainly cheatgrass with increasing amounts of bulbous bluegrass), widespread encroachment by juniper, and general understory depletion of native grasses and forbs. These issues can lead to a deficit of young and mid-age classes, and a surplus of older age classes of sagebrush. On the WMA, the primary concern is loss of mature sagebrush plants and depletion of quality understory vegetation component.
 - The priority threats include: Problematic Plant Species – Native Upland (Very High S&S); Drought (High S&S); Improper Grazing – Historic (High S&S).
 - In addition, there are several mountain sagebrush habitat threats on the WMA, which are considered moderate statewide, but the threats are causing a significant negative impact on this WMA. These threats include: Invasive Plant Species – Non-native; and Inappropriate Fire Frequency and Intensity. Both of these threats are resulting in an additional threat: Habitat Shifting and Alteration.
- **Mountain Shrub habitat:** Mountain shrub habitats on the MPWMA are comprised of Rocky Mtn. maple, serviceberry, chokecherry, snowberry, mountain mahogany, and, in canyons and ravines, bigtooth maple. Some of these species have re-sprouted following

the numerous fires that have occurred on the WMA, while other species are now limited in distribution across the property. There are no very high or high threats to this habitat type.

- The priority threats include: Invasive Plant Species – Non-native (Medium S&S); and Seeding of Non-native plants (Medium S&S).
- In addition, there are several mountain shrub habitat threats on the WMA, which are not of concern statewide, but which are causing a significant negative impact on this WMA. These threats include: Inappropriate Fire Frequency and Intensity and Problematic Plant Species – Native Upland. Both of these threats are resulting in an additional threat: Habitat Shifting and Alteration.
- Aquatic Forested habitat: Aquatic forested habitats are characterized by woody vegetation greater than 6 meters in heights. On the WMA, this habitat is found primarily along the Blacksmith Fork river, and in association with several springs: Garr spring and the spring at the mouth of Blacksmith Fork Canyon (this spring does not have a name).
 - The priority threats include: Presence of Diversions (Very High S&S); Water Allocation Policies (Very High S&S); Agricultural/Municipal/Industrial Water Usage (Very High S&S); Presence of Dams (High S&S); Channelization/Bank Alteration (direct, intentional) (High S&S); and Droughts (High S&S).
- Aquatic-Scrub/Shrub habitat: Aquatic scrub/shrub habitats are characterized by woody vegetation less than 6 meters high. On the WMA, this habitat is primarily found along Millville Canyon creek, Spring creek (Providence Canyon), and as an understory component at both spring locations and along the Blacksmith Fork River.
 - The priority threats include: Presence of Diversions (Very High S&S); Water Allocation Policies (Very High S&S); Agricultural/Municipal/Industrial Water Usage (Very High S&S); Improper Grazing (current) (High S&S); Channelization/Bank Alteration (direct, intentional) (High S&S); and Droughts (High S&S).
- Riverine habitat: Riverine habitats are primarily perennial streams that are constrained to a channel. On the WMA, this habitat is primarily found along the Blacksmith Fork river that has been constrained by the SR-101 bridge, homes located adjacent to and within the western floodplain, and by an irrigation diversion structure located immediately downstream of the WMA.
 - The priority threats include: Presence of Diversions (Very High S&S); Water Allocation Policies (Very High S&S); Agricultural/Municipal/Industrial Water Usage (Very High S&S); Presence of Dams (High S&S); Channelization/Bank Alteration (direct, intentional) (High S&S); Improper grazing (current); and Droughts (High S&S).

Big Game Range Trend Studies

Range trend condition information has been collected for the last 40 years by the Division. There is one active range trend transect site, and two suspended range trend transects located on the Millville-Providence WMA. A summary of this information is provided below. For more information, please refer to the following documents: 1971, Utah Big Game Range Inventory; 1982-1992, Utah Big Game Range Trend Studies; and 1995-2016, Utah Big Game Range Trend Study Reports (<https://wildlife.utah.gov/range-trend.html>). The Division will undertake another

analysis of the range trend site on the MPWMA in 2021.

The UDWR monitors one range trend transect on this management area, located at the mouth of Blacksmith Fork canyon (Site 2-2). In 2001, two transects were suspended on the WMA: Millville Canyon (2-8) and Broad Hollow Flat (2-10). Site (2-8) was suspended after inspection by the project leader found that there was very little sign of any wildlife use on the site. At Site (2-10), abundant elk pellet groups were found, but the site was dominated by bulbous bluegrass, with a few scattered, unused sagebrush and bitterbrush plants. Elk were being fed hay in the area during the winter by nearby landowners. Both sites are located in close proximity to each other and to the site at the Mouth of Blacksmith Fork Canyon (2-2). Range restoration efforts have been undertaken and as restoration continues, these suspended sites may be reactivated.

Mouth of Blacksmith Fork – Assessment Study No. 2-2

Site Description: This study is located slightly north of where the Blacksmith Fork river enters the Cache Valley. The study sits on a narrow bench about 200 feet above the big game fence, which runs along the east edge of the valley. When established in 1984, the plant community was a mountain big sagebrush site with sagebrush (*Artemisia tridentata* ssp. *vaseyana*) being the dominant browse species, with the herbaceous understory dominated by the invasive annual grasses: jointed goatgrass (*Aegilops cylindrica*) and cheatgrass (*Bromus tectorum*). The study site burned in 2007 and 2013. Following the fires, the site transitioned into an annual grass community with cereal rye (*Secale cereale*) and jointed goatgrass being the dominant species. The herbaceous understory has remained relatively diversified despite recent seeding efforts to rehabilitate the area. With the high cover of annual grass, the site has entered a period of increased fire frequency and lowered resilience to disturbance.

Utah's Watershed Restoration Initiative (WRI)/Habitat Council Habitat Projects

The Watershed Restoration Initiative (WRI) was established in 2005 as a partnership based program in Utah to improve high priority watersheds throughout the state. WRI is sponsored by the Utah Partners for Conservation and Development. The Watershed Program focuses on three ecosystem values: 1) watershed health and biological diversity, 2) water quality and yield, and 3) opportunities for sustainable uses of natural resources. WRI is a bottom-up initiative where project planning, review, and ranking occur at a local level.

The WRI focuses on enhancing Utah's water quality and yield, as well as its biological diversity. To achieve these results, WRI partners fund and perform physical and mechanical habitat manipulation, negotiate administrative changes in land management, and strengthen communication and team-building among the public and stakeholders.

As part of the habitat manipulation projects, range trend data is collected on selected treatment areas. Pre-treatment and post-treatment data is collected. The WRI range trend studies are used to evaluate the success and failure of land treatment projects. The health and vigor of big game populations are closely correlated to the quality and quantity of forage in key areas. Utah Division of Wildlife Resources (UDWR) biologists, public land managers and private landowners for habitat improvement planning purposes use range trend data.

Over the years, many vegetation restoration efforts have been undertaken to improve winter

forage conditions for both deer and elk. Table 6 includes projects completed on the Millville-Providence WMA since 1985. For project specific information, please see: <https://wri.utah.gov/wri/>.

Project #	Year Completed	Acres	Project Name
Pre-WRI	1985	??	30,000 shrub seedlings planted
597	2008	112	Millville Face WMA
972	2008	793	Millville WMA Fire Rehabilitation
1210	2010	27	Millville WMA Project
2322	2013	0.15	Millville WMA Shrub Planting
2486	2013	110	Millville WMA/USFS Fire Rehabilitation
2839	2014	1942	Millville WMA Fire Rehabilitation
4928	2019	150	Northern Region Browse

Table 6. WRI habitat projects on the Millville-Providence WMA.



Picture 6. WRI Project #4928. Scalper used to create planting strips. Picture taken facing north, November 18, 2019.



Picture 7. WRI Project #4928. Scalper used to create planting strips. Picture taken facing north, May 28, 2020.



Picture 8. WRI Project #4928. Scalper used to create planting strips. Note seedlings. May 28, 2020.

Future habitat improvement plans include scalping to remove the competition from annual grass to help establish critical winter browse. Scalping was first used on the WMA prior to 2013 and

proved to be an effective method of establishing of establishing browse in steep sites that are dominated with annual grasses or other highly competitive non desired species. The WMA was treated again with the scalper fall of 2019 with similar results expected. Given the difficulty of effectively treating steep sites, scalping projects are planned to continue on the WMA with the goal of establishing a varied age class of browse species. In addition, outdoor recreation groups and dedicated hunting groups will continue to be utilized in planting potted browse species into the scalps.

Habitat Limitations

Over the years, the lower elevations and south slopes of the MPWMA have lost many of the perennial grass and winter browse component species important for wintering wildlife. This shift of habitat condition has been due primarily to wildfire events, along with past grazing practices and drought. Most of the slopes on the WMA are steep and rocky making it difficult to prepare an adequate seedbed, and subsequently seed the property into a desired browse condition. In addition, proliferation of invasive and aggressive annual grasses, such as cheatgrass and bulbous bluegrass, makes it challenging for rangeland seeding to be successful. Over the years, many types of equipment have been utilized to create an adequate seed bed, with limited success. Habitat projects involving the use of scalping appear to be the most effective treatment method utilized to date.



Picture 9. Fire on Millville-Providence WMA, July 2007.

Human use-related concerns

Throughout the years there have been increasing problems with illegal OHV use throughout the property which is degrading habitat, and creating illegal trails and hill climbs that have led to erosion. In addition, paintball enthusiasts and target shooters have heavily utilized Providence Canyon, and have brought in a lot of junk debris and material. As one result of a USU study (see discussion below), UDWR completed a concerted clean-up effort of these materials. In addition, the

UDWR portion of the property was signed to identify appropriate uses. When the Providence Canyon trail was created, the paintball and target shooting use substantially diminished in the immediate area. However, the shooting has been pushed to other areas of the canyon on the WMA and onto the adjacent USFS lands. As noted in the Public Recreation section of this plan, Providence Canyon will be closed to target shooting to provide for public safety in this heavily used area.

In addition to the dispersed camping throughout Providence Canyon, there has also been dispersed camping along the Blacksmith Fork River. This camping tramples and degrades important riparian habitat.

The most common problem occurring in both Millville and Providence Canyons is litter left behind by non-traditional activities (paint ball shooting; air-soft activities; etc...).

While UDWR has approved several trails on the WMA, we are aware of several other illegally created trails throughout the property. Where feasible, those trails will be reclaimed and we will work to prevent additional illegal trails. In addition, instead of using the identified and existing access points on the WMA, the public frequently cuts the deer fence on the western boundary of the WMA to gain access. UDWR finds and repairs these holes, but new holes continue to be cut.

The diversity of recreational uses resulted in user conflicts within Providence Canyon and subsequently led to concerns about how to address the myriad of uses. In 2008, a graduate student from Utah State University completed a Capstone project in fulfillment of a Masters of Natural Resources degree (Ms. Peggy Wilson). This report, "Characterization of Resource and Social Conditions in Providence Canyon of the Uinta-Wasatch-Cache National Forest in Cache, Utah" included both UDWR and U.S. Forest Service lands. The purpose of the research was to *"understand participants' perception of compatibility or non-compatibility of outdoor recreational activities and their attitudes toward the degree and kind of management and recreation in the project area"*. This objective of the research was to provide information and recommendations to both management agencies to reduce user conflicts. The top 2 concerns raised from the study included: Water Quality; and Unmanaged Recreational Activities which includes irresponsible OHV use and user-developed trails; too many dispersed camping sites; and recreational target shooting. Recommendations included that "agencies cooperate and develop a plan for the whole area so the confusion of what is acceptable and not under different lands owners was made clearer." As of this time, no formal plan has been developed between UDWR and the USFS, however each agency continues to work independently to resolve user conflicts, while having similar goals and with keeping the other agency in mind.

Since the 8' high wildlife exclusion fence was installed, the fencing on the west bank of Blacksmith Fork River, on the south-western corner of the WMA, has either fallen into disrepair and/or been removed by landowners whose backyards abut up to the WMA. As a result, homeowners have taken it upon themselves to "use" the WMA land as part of their residential lot. This use has included removing fencing and signs, clearing riparian vegetation to gain access, planting ornamental plants and gardens, and, in one case, building a deck/pier out over the river. UDWR has proposed a re-fencing project for this boundary area, using wooden fencing which should be more palatable to the homeowners. The boundary will also be signed. Clearing a trail south to the SR-101 Bridge over the river has also been proposed to provide visible angler access.

The majority of the property is annually closed Jan. 1, opening on the second Saturday of April. However, both the Millville Canyon and Providence Canyon roads in the canyon bottoms remain open yearlong. Antler/shed, gathering is a huge activity on the property that has created problems with people trespassing in order to collect deer and elk sheds. Some people also trespass on private property around the WMA to collect sheds. There have also been problems of people chasing deer to promote antler shedding, and reports of poachers killing deer to collect antlers.

Target shooting and overnight camping are not permitted in the canyon bottoms of either Providence or Millville Canyons. This is due the public safety issues created by yearlong high vehicle and pedestrian traffic on roads and trails, along with the increase in long-term encampments, trash and illegal activities. This closure extends from the western WMA boundary entrance of each canyon, east to the eastern WMA boundary with the U.S. Forest Service: Providence Canyon = 1 mile; Millville Canyon = ½ mile.

Adjacent Land Uses and Potential Impacts

Much of the property to the west has been developed into residential neighborhoods. This urban sprawl is expanding closer to the WMA's western boundary and the big game fence. Traditionally, the land to the west was used for agriculture, particularly dairy production. Some agricultural land still exists and serves as pasture for livestock, and for small grain and hay production. The land to the east is owned by the U.S. Forest Service. Various recreation uses occur and include camping, hiking, hunting, and OHV recreation. The Forest Service experiences illegal off highway vehicle use that degrades soil and vegetation during the spring, summer and fall months, and snowmobiles that disturb wintering deer and elk. The land north and south of the WMA is privately owned, with the primary activity being cattle grazing.

III. Management Goals and Objectives

Management of the Millville-Providence WMA will take into account the goals, objectives and strategies of other Division planning efforts. These other plans are briefly discussed below.

UDWR Strategic Plan (2019)

The management of the Millville-Providence WMA has relevance to the following goals and objectives outlined in the Division's 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 R3 - Increase our knowledge of crucial fish and wildlife habitats and migration patterns.

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 (species, AIS, disease, etc.).

Objective R5 – Manage [special status species] populations to prevent them from being federally listed as threatened or endangered, and work to delist those species that are currently listed.

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

Objective C1- Increase participation in fishing, hunting and other wildlife-related activities.

Objective C6- Increase hunting and fishing opportunities.

The UDWR Strategic Plan (2019) is in the process of being updated and the text in brackets above may be changed in the new version of the Strategic Plan. Overall, these goals and objectives will be accomplished by properly managing the vegetation, wildlife and human components of the WMA according to those strategies mentioned in the property and habitat management sections below. The sections detail property maintenance and development, wildlife and habitat management, and access and fire management on the WMA.

Wildlife Action Plan

The current Wildlife Action Plan (WAP), effective 2015-2025, is entitled the “Utah Wildlife Action Plan: A plan for managing native wildlife species and their habitats to help prevent listing under the Endangered Species Act.” This document outlines a state-wide approach for the planning, cooperation, coordination, and implementation of wildlife and habitat conservation practices. The WAP address the following elements:

- Wildlife distribution and abundance, especially for Species of Greatest Conservation Need.
- The habitat extent and conditions essential for the conservation of rare and declining species.
- The major problems impacting rare and declining wildlife species and their essential habitats.
- The research or surveys needed for identifying and understanding the key factors in effective restoration and conservation.
- Prioritized actions to be taken to conserve rare and declining wildlife species and their habitats.
- The need for periodic monitoring of selected species or their habitats, to gauge the effectiveness of conservation actions, and to adapt conservation to better information or changing conditions.

The MPWMA HMP process is used to address wildlife species and habitats found on the WMA, by explicitly including their needs in routine, novel, and emergency 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.

The MPWMA has several key habitats of statewide and local concern that include aquatic scrub/shrub, riverine, mountain sagebrush and mountain shrub habitats. One of the intents 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. Most of the threats to the key habitats are unable to be directly addressed on the MPWMA. However, management at MPWMA attempts to address threats to these habitats to the extent possible, by managing for a diverse range of habitats in various successional stages that maintain and benefit the wide variety of wildlife species found on the WMA. For more information on the habitats of concern identified in the Wildlife Action Plan, please see the discussion in Section II Property Inventory, Important Fish and Wildlife Habitats, Wildlife Action Plan Habitats.

Wildlife Species Management Plans

The management of this unit will address the limiting factors and habitat needs identified in each of these species plans, and will seek to implement habitat management strategies that are needed to reach or maintain population objectives. Overall management goals include a population of healthy animals capable of providing a broad range of wildlife recreational opportunities, including hunting and non-consumptive opportunities, such as wildlife viewing. UDWR also strives to consider impacts of the deer and elk herds on other land uses and public interests, including private property rights, agricultural crops and local economies. This goal also includes activities to maintain populations at levels that are within the long-term capability of the available habitat to support.

The UDWR manages deer and elk in conjunction with local agencies, along with the Mule Deer Foundation and the Rocky Mountain Elk Foundation. These agencies all work to restore, improve, and protect important habitat; foster cooperation with other federal, state, and private organizations; and educate the public about conservation, management, and hunting ethics.

Deer and Elk Management Plans – Unit 2 (Cache; 2017)

Deer Management Plan-Unit 2 (Cache Unit includes Cache and Rich Counties)

The deer management plan for this unit was completed in 2017 with the deer population currently being under objective. The target winter herd size is 25,000 wintering deer, with a post hunting season herd composition of 15-17 bucks per 100 does. The current population estimate on the Unit is 15,000 wintering animals.

The largest threat to mule deer habitat on the Wellsville and Cache areas is the direct loss of crucial winter range acres due to development and urbanization. Most of the increase in home building is occurring on the foothills in what was historic deer winter range. Additional threats and losses to deer winter range is the reduction in habitat quality due to the loss of critical browse species (sagebrush, bitterbrush etc...). This loss has been attributed to a number of factors, including fire, agriculture, drought etc. However, the abundance of weedy annual grass species, such as cheatgrass, and the increase of the exotic, weedy, perennial bulbous bluegrass are the more likely causes of sagebrush decline. These weedy species can form dense mats of cover that compete with seedlings and young sagebrush plants, which limits establishment of new sagebrush plants into the population. As the sagebrush population matures, decadence increases and density decreases as old plants begin to die. The range trend summary on the WMA shows an

increase of weedy species. In addition, these weedy grass species increase the chances of a catastrophic fire event.

Mule deer winter range habitat has also seen a decrease in sagebrush density. The moderate drought in recent years has likely caused increased stress on plants. Sagebrush age structure across the area is generally old and of one age class. The lack of regeneration of the stands through establishment of young sagebrush is a concern. As browse species decline, perennial grass and forb species have increased, and may compete with browse establishment.

Crucial mule deer habitat in all areas on the Cache Unit is also being lost and degraded through Juniper expansion. In certain areas where Juniper stands occur, the spread and invasion of young juniper have had a dramatic negative impact on existing browse and other understory species.

To address the direct loss of habitat, efforts will be made towards the protection and conservation of remaining mule deer habitat. Efforts must be made to work with counties, cities, private landowners and federal agencies to maintain and protect critical and existing winter range from future losses. Through existing partnerships and developing new conservation partners, efforts are being made to identify and prioritize critical habitat areas. Conservation easements will be an important part of this effort.

To address habitat quality and degradation, habitat improvement projects have been and will continue to be planned throughout the unit. Habitat projects have been and are being done on UDWR WMA's, private lands, and US Forest Service lands throughout the unit. The habitat projects are designed to address the specific issues within each project area that will improve mule deer habitat. A listing of suggested projects specific to Millville-Providence WMA can be found in the Habitat Improvement Section of this HMP.



Picture 10. Mule deer release on the Millville-Providence WMA. March 4, 2020.

Elk Management Plan-Unit 2 (Cache Unit includes Cache and Rich Counties; 2016)

The Unit Management Plan for elk was completed in 2016 with the elk population currently being at objective. The target winter herd size is 2,300 wintering elk. Average age of bulls harvested from the South Cache is 6.75 years old. Most of the range on the unit is in suitable condition to expect growth in elk numbers into the future. Population management objectives can be achieved by enhancing winter range forage production through direct range improvements throughout the unit.

At this point in time, neither habitat quality nor quantity appears to be a limiting factor on this unit. Brucellosis has not been detected in elk on the Cache unit, but neighboring States have positive populations. Other issues like external parasites, and more common diseases, do occur within the population.

Due to the above risks, it is not advisable to continue to congregate elk on feed rows within the unit. Annual feeding has been phased out on the Millville-Providence WMA, and it is being evaluated at Hardware Ranch WMA. This is being accomplished using a phased process which began in the winter of 2016-2017, with placing GPS collars on elk to monitor their movements before and after changes to the feeding program at Hardware Ranch. Feeding operations will spread elk out over the large meadow area in order to reduce nose to nose contact, and feeding will cease around the second weekend in February to encourage dispersion as the elk enter the window of greatest disease risk due to fetal abortions in the last 5 months of pregnancy. UDWR will continue to conduct disease sampling efforts and monitor collared elk movements.

Habitat projects will be proposed in the area in anticipation for more dispersed elk throughout the area. Management will be adaptable during this process, as we evaluate how elk are reacting to the changes. This change in the feeding operations at Hardware Ranch WMA may contribute to changes in elk and mule deer use of the MPWMA. UDWR will monitor where elk are going, impacts to habitat, and to other ungulates, especially mule deer. Disease monitoring will continue to detect any disease outbreaks within the herd.

Habitat improvement projects have been and will continue to be planned throughout the unit. Specific projects will be developed to enhance habitat in the greater Hardware Ranch WMA area, which includes the Millville-Providence WMA, to disperse animals and minimize disease concerns. In addition, efforts will continue to pursue conservation easements in Cache Valley to protect critical elk habitats. A listing of suggested projects specific to MPWMA can be found in the Habitat Improvement Section of this HMP.

Bonneville Cutthroat Trout Range-wide Conservation Agreement and Strategy (UDWR Publication #18-11; 2019)

Under this Agreement, Bonneville cutthroat trout are currently managed as a Conservation Agreement Species by the U.S. Fish and Wildlife Service. As part of the Agreement and strategy, all the signatories to the Agreement, including UDWR, have agreed to work towards restoration of the species to prevent further population declines and to prevent the species from being listed as threatened or endangered. As part of this overall strategy, efforts to protect existing Bonneville cutthroat trout populations are undertaken, along with efforts to restore or

recover the trout into historical habitats. The Agreement officially took effect in Dec. 2019 when the final signatures were secured.

IV. Strategies for Property Management

Administrative Activities

- Issue an easement to Millville City for all water pipelines and infrastructure.
- Issue an easement to the Garr Springs Irrigation Company for Garr Spring infrastructure.
- Develop an MOU with Providence City for the 3 parking lots and 2, day-use only areas with picnic tables.

Annual Maintenance Activities

- Fence and gate maintenance: The deer fence is maintained yearly by UDWR. In addition, the livestock grazers annually ride and fix the fence as needed prior to turnout of their animals. Other fences along the roads and inside the property are repaired or replaced as needed.

The fencing on the west bank of Blacksmith Fork River, on the south-western corner of the WMA, has either fallen into disrepair and/or been removed by landowners whose backyards abut up to the WMA. UDWR has proposed a re-fencing project for this boundary using wooden fencing which should be more palatable to the homeowners. The boundary will also be signed. Clearing a trail south to the SR-101 Bridge over the river has also been proposed to provide visible angler access.

- Signs: Maintain boundary, entrance, and regulatory signs to clearly identify ownership, access, vehicle restrictions, and rules and regulations enforced on the WMA. In addition, add the following signs:
 - Providence Canyon: Post new signs to prohibit camping and target shooting in the canyon bottom for one mile from the WMA western boundary canyon entrance to the eastern boundary with the USFS lands.
 - Millville Canyon: Post new signs to prohibit camping and target shooting in the canyon bottom for one-half mile from the WMA western boundary canyon entrance to the eastern boundary with the USFS lands.
- Road maintenance: The roads on the property are closed to public vehicle access year round, except for the main canyon access roads. These main access roads are not maintained by UDWR. The dirt/gravel access roads are improved as needed. UDWR maintains the road along the big game fence.
 - The cattle guard in Millville Canyon will be evaluated for replacement.
 - In the spring of 2020, Cache County mowed the vegetation on the deer fence road, approximately 8' wide, to reduce the fire hazard. Mowing will continue to be done as needed to reduce the fire hazard.
- Parking areas: There are four small parking areas located on the WMA: one at the mouth of Providence Canyon; one three quarters of a mile up Providence Canyon;

one at the mouth of Millville Canyon; and one at the mouth of Blacksmith Fork Canyon associated with the day use area. UDWR maintains 3 of the 4 parking areas on the WMA. Providence City maintains the parking area adjacent to the snowmobile garage in Providence Canyon.

- Water Developments: The water developments on the property, with two-track roads running to them, are owned by Millville City and Providence City. The cities maintain both the water developments and the spur access roads at their discretion. The administrative road that follows the Big Game fence serves as access roads to these structures.
- Wildlife/Livestock troughs: UDWR and the livestock grazers maintain the troughs as needed.
- Hay Shed: The hay shed has collapsed and will be removed.
- Snowmobile Shed: The owner of the building will remove it in summer 2020/
- Trails: There are numerous trails on the WMA including the Bonneville Shoreline Trail along the deer fence road and the Providence Canyon Trail up Providence Canyon. Millville City, Providence City and Cache County maintain these trails, along with installing and maintaining signage and pedestrian gates.
- Noxious weed control: Map invasive weeds on an annual basis to prevent further weed expansion on the property. Annually spray weeds as needed.
- Kiosk: Repair and paint the 2 Kiosks every 2-3 years or as needed. Consider adding a kiosk in Providence Canyon. Providence City has indicated a desire to create, install and maintain a kiosk.

Compatibility of Proposed Uses with Local Government General Plans and Zoning and Land Use Ordinances

The current and proposed wildlife habitat and recreation uses for the MPWMA are compatible with local government plans, zoning requirements and land use ordinances for Cache County. The WMA land above the deer fence is currently zoned by Cache County as Forest Recreation, FR-40. Land on the eastern boundary of the WMA is owned by the U.S. Forest Service.

The majority of the WMA lies east of, and outside of, the town boundaries of both Millville and Providence Cities, with the 8' high deer fence "defacto" marking the boundary between the WMA/County administered lands boundary and each City's boundary. Each City has zoned the lands immediately west of the deer fence as residential. As the deer fence has been in place since the 1950's, and the WMA has been managed for wildlife for the same period of time, landowners/homeowners appear to accept the presence of the WMA and appreciate the open space behind their

homes. However, hunters, hikers, bikers and other individuals continue to cut holes in the fence behind homes to access the WMA. Many times these areas are not re-secured to prevent deer from getting onto the downslope private lands.

Currently, Millville City is developing land west of the deer fence road. This will significantly increase the number of homes along the border of the WMA. The increase in homes will provide a greater likelihood of fire starts advancing into the WMA, as well as increased risks to public and property should a fire start on the mountain and burn down toward the new homes.

There are two small parcels of adjacent private lands, one in each town, are located east of the deer fence. These parcels are surrounded on the north, south and east by the rest of the WMA. UDWR will continue to contact these private landowners to acquire these land parcels.

V. Strategies for Habitat Management

Unit Management Plans for wildlife species

Strategies for habitat management will be consistent with those outlined in the deer and elk management plans for Unit #2, and the Utah Wildlife Action Plan. These strategies include, but are not limited to:

- Continue to monitor the permanent range trend study site located on the WMA.
- Plan and implement habitat improvement on the WMA to re-establish browse communities for deer. Continue efforts to control non-native annual grasses.
- Work cooperatively with land management agencies and private landowners to plan and implement projects that will improve wildlife habitat and range conditions in general on surrounding lands. Improvement projects will focus on improving winter range for deer and elk within Unit 2.
- The property should be surveyed for the presence of state sensitive terrestrial and aquatic species, and for WAP SGCN species.
- Recognize the value of the WMA for migrating and nesting neotropical bird species, and maintain and enhance high quality habitat for these birds, while minimizing disturbance impacts.
- There are no individual management plans for any Species of Greatest Conservation Need. In the future, as species management plans are written and adopted by the Utah Wildlife Board, they may be implemented at MPWMA.

Habitat and Infrastructure Improvement Plan

- Maintain entrance fences and gates to prevent habitat damage from unauthorized vehicles use.
- Continue to monitor illegal mountain bike trails and work to reclaim the sites.
- Monitor and spray noxious weeds to reduce and eliminate the spread of these weeds on the property
- Continue to use livestock grazing as a habitat management tool to assist with revegetation efforts, control noxious and invasive species, and to reduce fuels. Monitor the intensity of the grazing and its effects on the WMA. Evaluate current

- grazing leases to determine if additional infrastructure is needed.
- Implement the wildfire management recommendations to reduce the risk of wildfire across the property. These recommendations include working closely with the FF&SL and the Cache County Fire Marshal.
 - Improving and widening the deer fence road to accommodate fire fighting vehicles.
 - Creating a 30' wide buffer strip adjacent to the east side of the deer fence road to reduce fuel loads. This strip would be planted with drought tolerant, fire-resistant grasses and forbs that also provide forage value for wildlife. This strip would also provide a continuous fuel break with firefighter access between Millville and Providence Canyons.
 - Remove the dense stands of juniper and other woodland plants on both sides of the Providence Canyon road from the canyon entrance, east to the WMA property boundary. This project would reduce fuels in Providence Canyon and tie in with similar Forest Service projects in upper Providence Canyon.
 - Undeveloped crucial winter range on private lands surrounding the WMA will be evaluated for potential protection and habitat enhancement efforts through conservation easements, fee title acquisition, and habitat improvement opportunities.
 - Specific projects are currently being developed to enhance the browse habitat on the steep slopes of the WMA. Projects will include the use of the scalper to establish browse and forbs. Additional projects may be proposed in the future for the lower foothill and benches, along with continued weed treatments.
 - Work with UDWR Range Trend Crew to consider the movement of the range trend transect to more suitable locations which will provide for a better assessment of habitat conditions. UDWR will evaluate re-activation of the suspended range trend sites.

Access Management Plan

All activities on the WMA will be considered according to the UDWR Administrative Land Rule (R657-28). In general, activities that do not support the purpose for which the WMA was acquired, or activities which do not promote or protect the goals and objectives of the unit, will be prohibited. This specifically applies to those activities that disturb or harass wildlife, or degrade important habitats.

The MPWMA, outside of the main access roads in the canyon bottoms, will be annually closed to all public access during the winter months (Jan. 1 to the second Saturday in April, opening on that second Saturday) to protect wintering wildlife. When the property is within a hunt unit boundary where late season big game hunts are available, public non-motorized access to the WMA may be provided to hunters with a valid big game hunting tag for this unit.

The property is accessible yearlong from the Millville Canyon Road, Providence Canyon Road, and Blacksmith Fork Canyon Road. The “deer fence road” is only open for Administrative access by UDWR and Millville City (to maintain Garr Spring water

development). Non-motorized trails are located on the western boundary of the WMA (the Bonneville Shoreline Trail), and up Providence Canyon (Providence Canyon Trail). There are four small parking areas located on the WMA: one at the mouth of Providence Canyon; one three quarters of a mile up Providence Canyon; one at the mouth of Millville Canyon; and one at the mouth of Blacksmith Fork Canyon associated with the day use area.

Target shooting and overnight camping are not permitted in the canyon bottoms of either Providence or Millville Canyons. This is due to yearlong high vehicle and pedestrian traffic, along with the increase in “squatters”, trash and illegal activities. This closure extends from the western WMA boundary entrance of each canyon, east to the eastern WMA boundary with the U.S. Forest Service.

Fire Management Plan

Over the last 15-20 years, there have been multiple wildfires on the WMA with multi-agency discussions about what actions need to be taken to control fire, and to prevent or decrease the severity of wild fires.

In general, Utah Wildfire Risk Assessment’s (WRA) provide a consistent, comparable set of scientific results to be used as a foundation for wildfire mitigation and prevention planning in Utah. Results of these assessments can be used to help prioritize areas in the state where mitigation treatments, community interaction and education, or tactical analyses might be necessary to reduce risk from wildfires. Specifically, WRA’s are designed to provide the information needed to support the following key priorities:

- Identify areas that are most prone to wildfire.
- Plan and prioritize fuel treatment within programs.
- Allow agencies to work together to better define priorities and improve emergency response, particularly across jurisdictional boundaries.
- Increase communication with local residents and the public to address community priorities and needs.
- Identify areas where additional tactical planning may be desirable, specifically related to mitigation projects and Community Wildfire Protection Planning.
- Provide the information necessary to support resource, budget and funding requests.
- Plan for response and wildfire suppression resource needs.

The Utah Division of Forestry, Fire and State Lands (FF&SL) developed a (WRA) report for the Millville-Providence WMA to help UDWR understand the various fire aspects on the WMA. This report provides a large amount of information about the WMA including: historical fire patterns; the vegetation susceptibility to fire; and the fire risk and threats to the WMA. While the Millville WRA only uses fire data up until 2008, the WRA information is valuable to understanding the history of fires on the WMA and to assist with planning for future WMA habitat activities to reduce wildfire impacts.

Between 1999-2004, the WMA had fires every year that each burned several hundred acres. The cause of these fires includes campfires, along with natural causes. The bench above Millville east of the deer fence is a constant problem for wildland firefighters due

to the difficult terrain and inadequate access for fire apparatus. By improving the deer fence road and reducing the fuels that grow in and around the road, firefighters will be able to access the area in a timelier manner, and with less risk. This area would greatly benefit from an improved road along with a thirty-foot buffer along the east edge of the road to reduce fuels and encourage fire resistant species. In addition, dense junipers and woodland species along Providence Canyon road are creating hazardous conditions for wildland firefighters to fight fire in this area.

The Millville WRA provides several data layers identifying different aspects of the wildfire risk. The Wildfire Risk Assessment combines Fire Threats (the likelihood of an area burning), with Fire Effects (areas which have important values, and where fire suppression activities are difficult). Almost 70% of the WMA has a wildfire risk category between moderate (12.4%) to extreme (19.2%). This equates to approximately 3,341 acres.

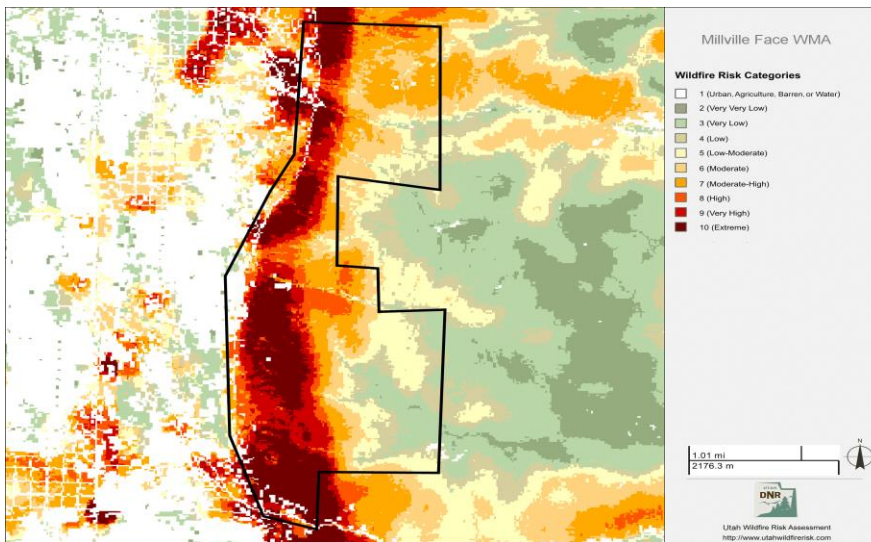


Figure 1. Millville-Providence WMA Wildfire Risk Categories.

In addition to the Wildfire Risk Assessment, the Fire Threat Index is derived from historical fire occurrence, landscape characteristics including surface fuels and canopy fuels, percentile weather derived from historical weather observations and terrain conditions. These inputs are combined using analysis techniques based on established fire science to develop resultant fire behavior. The Wildfire Threat Index for the Millville-Providence WMA includes approximately 3,053 acres or 65% of the WMA that is considered at moderate to extreme risk for wildfire.

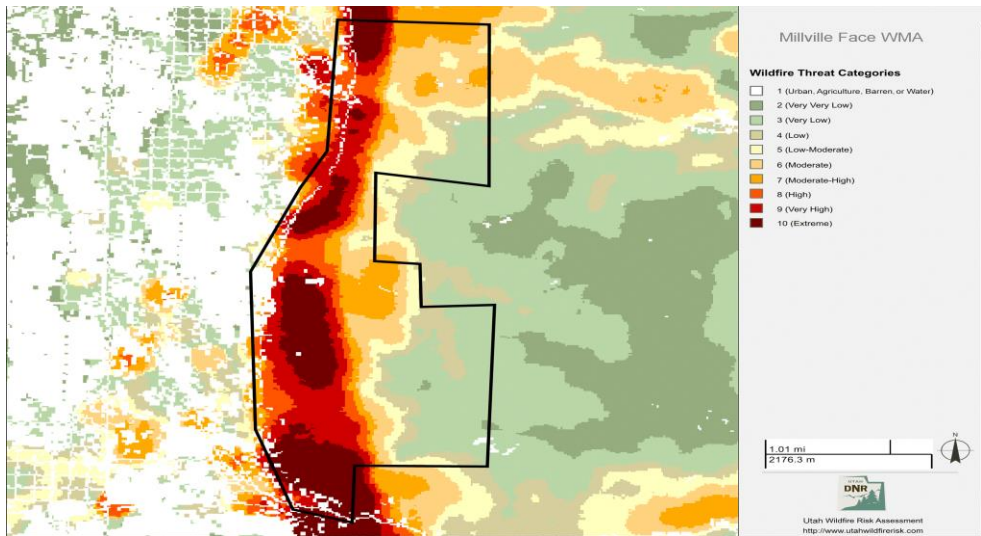


Figure 2. Millville-Providence WMA Wildfire Threat categories.

The WRA Suppression Difficulty data layer reflects the difficulty or relative cost to suppress a fire given the terrain and vegetation conditions. This layer is an overall index that combines the slope steepness and the fuel type characterization to identify areas where it would be difficult or costly to suppress a fire due to the underlying terrain and vegetation.

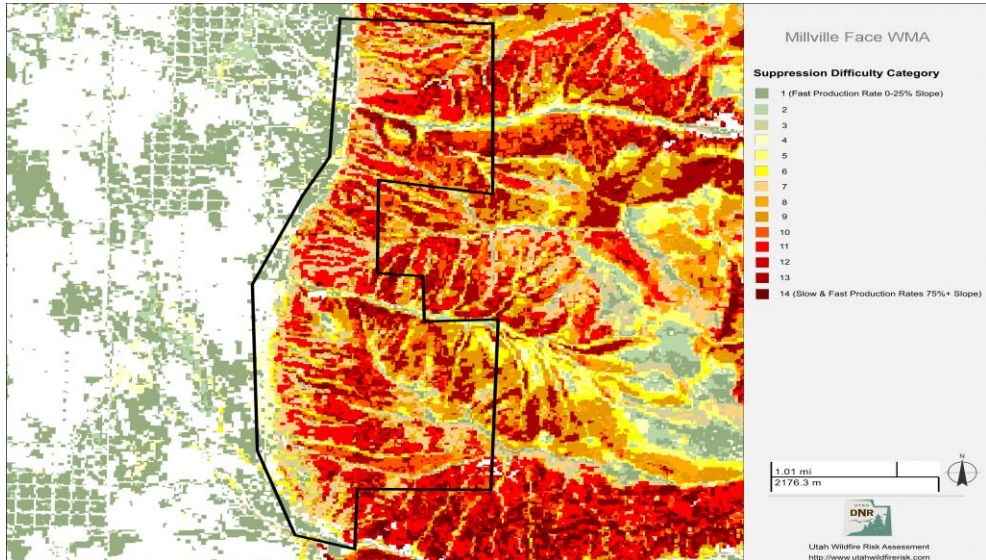


Figure 3. Millville-Providence WMA Suppression Difficulty category.

The WRA also provides information pertaining to the vegetation components which could be most adversely affected by fire. This includes forested lands categorized by canopy height, canopy cover and susceptibility or response to wildfire. Of the approximately 2,767 acres of forested habitat on the WMA, approximately 65% of the vegetation is considered resilient (species with characteristics that help the tree resist damage from fire) and 32% are considered adaptive (tree species adapted with the ability to regenerate following fire).

Several projects have been proposed by FF&SL on the WMA to reduce the wildfire risk and

severity of wildfire on the WMA. These projects also address one of the key threats to the WMA as identified in the WAP: "Inappropriate Fire Frequency and Intensity". These proposed projects include, but are not limited to:

- Improving and widening the deer fence road to accommodate fire fighting vehicles.
- Creating 30' wide buffer strips adjacent to the east side of the deer fence road to reduce fuel loads. This strip would be planted with fire-resistant vegetation. This would also provide a continuous fuel break with firefighter access between Millville and Providence Canyons.
- Remove the dense stands of juniper and other woodland plants on both sides of the Providence Canyon road from the canyon entrance, east to the WMA property boundary. This project would reduce fuels in Providence Canyon and tie in with similar Forest Service projects in upper Providence Canyon.

Livestock Grazing Plan

Grazing is undertaken on the WMA using the UDWR Use of Division Lands Rule (R657-28). Cattle grazing will be done using a grazing prescription designed to achieve specific goals and objectives. Annual livestock grazing is planned to continue along the fenced portion of the Millville bench between Blacksmith Fork and Millville Canyons. The two southern pastures will be rested from annual grazing to accommodate restoration activities. The grazing will be moved to the northern pastures for several years. Livestock will be limited to spring use and applied to give a growth advantage to shrubs and to reduce fire potential. Livestock grazing is currently scheduled between the dates of 1 May to 15 June. However, in years of early spring green-up, livestock grazing may begin as early as the second Saturday of April, and in years of a late spring or heavy growth, livestock grazing may continue until as late as 30 June, as determined by the area biologist.

Wood Products

There are no wood products to be harvested from the MPWMA.

VI. Summary Statement of Proposed Uses

The Millville-Providence WMA is used primarily for winter range for deer and elk, and is closed to the public from January 1 until the second Saturday of April. During the summer and fall, there are opportunities for outdoor recreation including hiking, hunting, fishing, horseback riding, and wildlife watching.

VII. Monitoring and Evaluation

UDWR will complete the following monitoring and evaluation on the WMA.

- Vegetation Transects at the range trend survey sites every 5 years.
- New habitat projects will be developed and implemented.
- Completed habitat projects will also be monitored.
- Fish and wildlife surveys/counts for game and non-game species.

The Northern Region Habitat Section, area wildlife biologist, Habitat maintenance specialist and the area conservation officer will be responsible for monitoring the overall effectiveness of this plan. Appropriate sections and staff will provide expertise as required. The Habitat Maintenance Specialist will monitor the needs and effectiveness of physical facilities and improvements. If necessary, the district conservation officer will write or amend an action plan for this property. All individuals and sections will report to the Regional Management Team through their supervisors. The area wildlife biologist, with assistance from a regional team, will amend this plan as needed.

VIII. Appendices

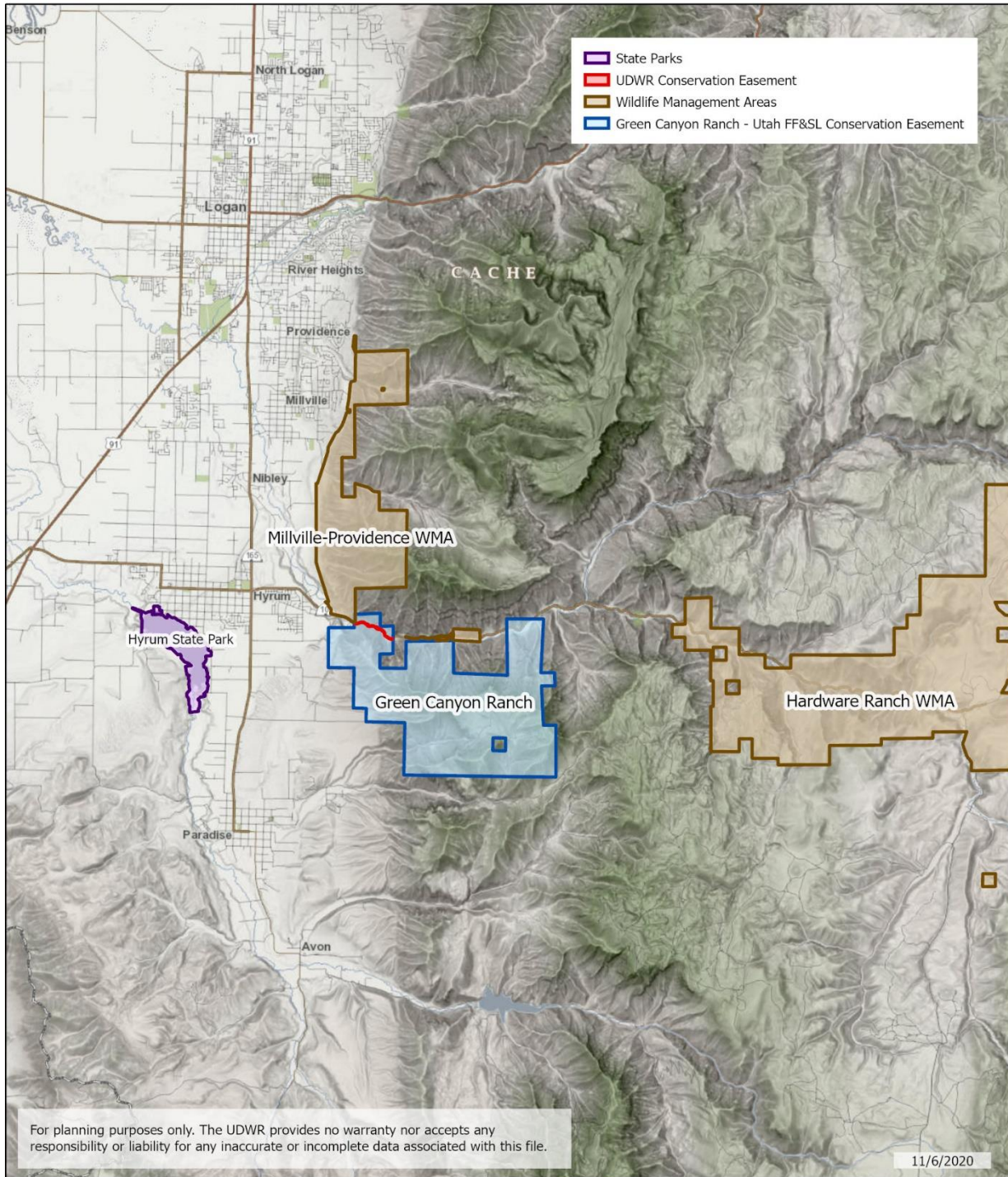
- A. Maps
 - General Location Map
 - Land Ownership Map
 - Access Map
 - Infrastructure Map
 - Grazing Map
- B. Legal Descriptions and Encumbrances:
 - Parcel Deed Map
 - Legal Boundary Descriptions and Parcel Encumbrances

Appendix A

Maps



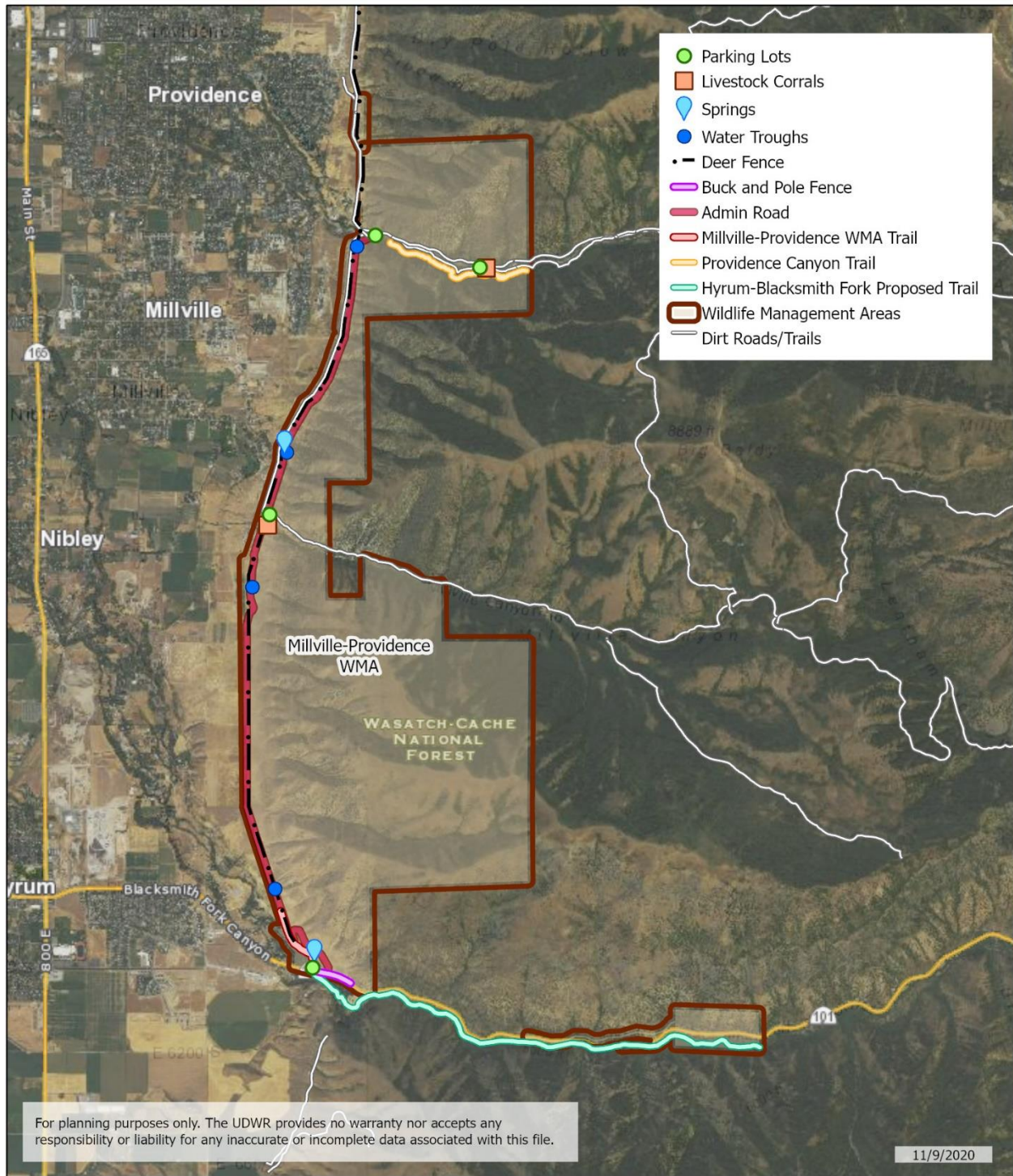
Millville-Providence WMA General Location





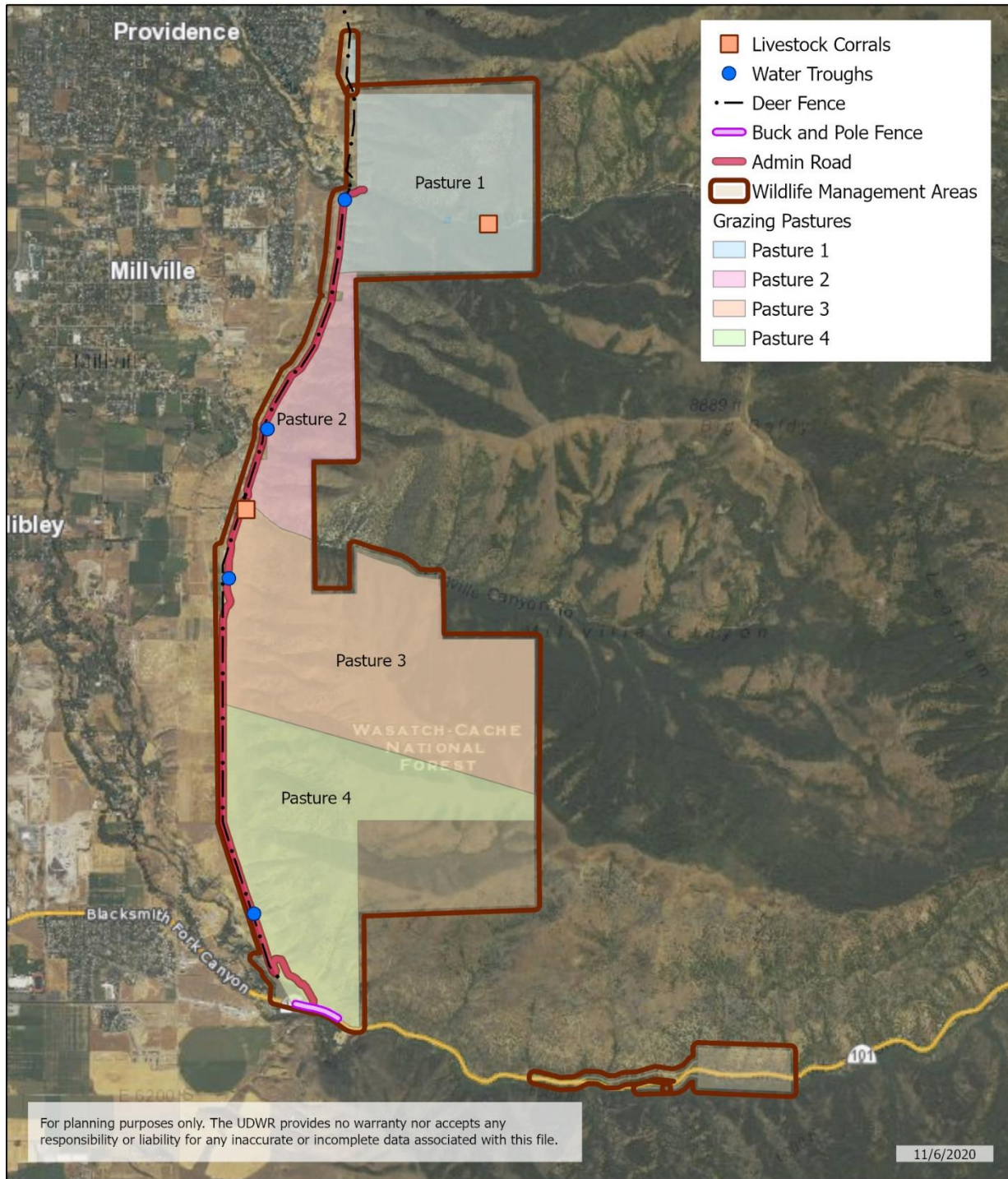
Millville-Providence WMA

Access



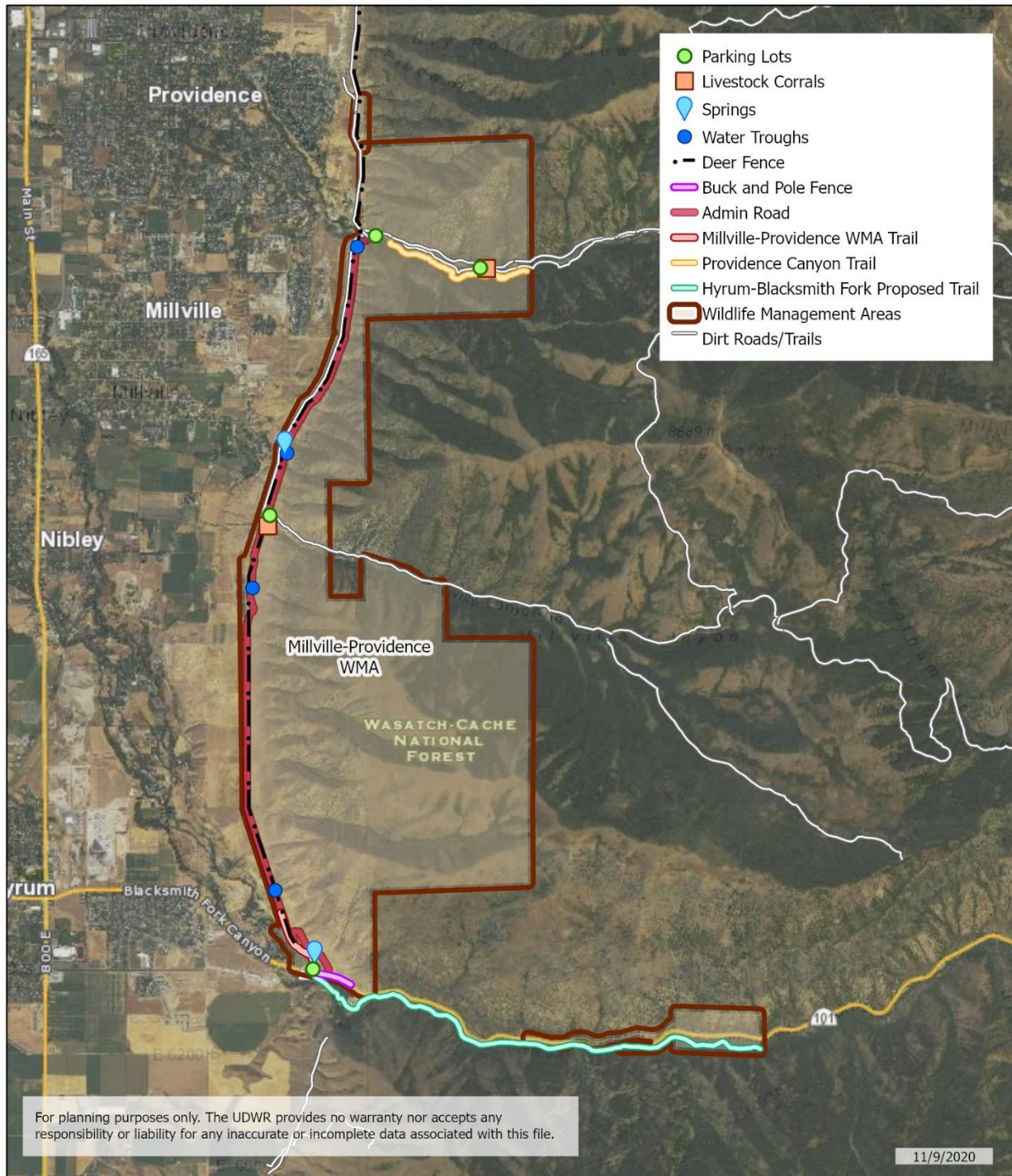


Millville-Providence WMA Grazing Pastures





Millville-Providence WMA Infrastructure

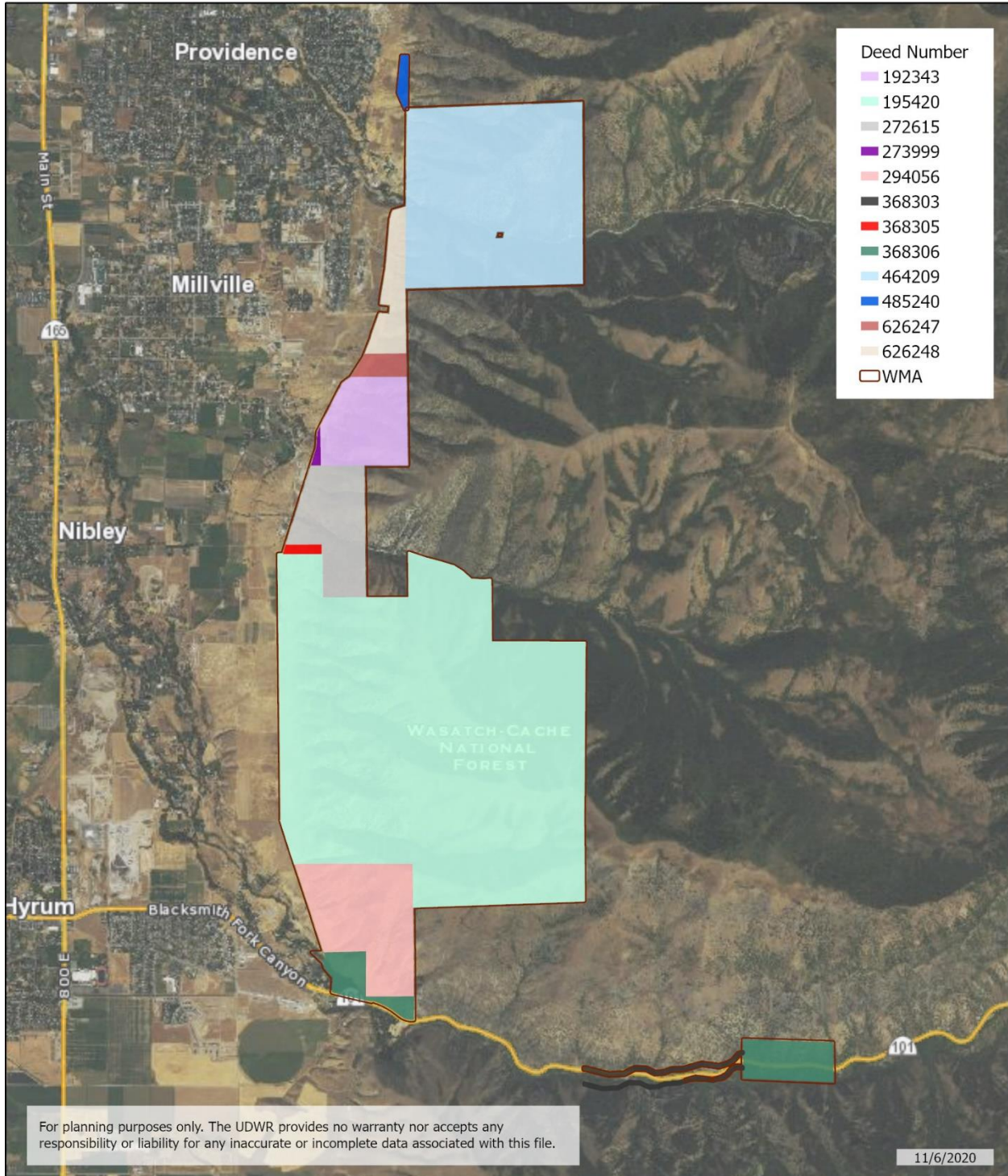


Appendix B

Legal Descriptions and Encumbrances



Millville-Providence WMA Parcel Deeds



Parcel Legal Boundary Descriptions Agreements, Enhancements, and Easements

Grantor: *Moses and Sarah Thatcher (147.49 acres)*

Warranty Deed #192343 Book: 77 Page: 508 Signed: 9/13/1941 Recorded: 9/13/1941

Township 11 North, Range 1 East

Section 23: SE1/4

Encumbrances & Limitations:

- ROW for Telluride Power Company

Grantor: *G. Alfred and Amanda Anderson (1,831.64 acres)*

Warranty Deed #195420 Book: 78 Page: 198 Signed: 5/16/1942 Recorded: 5/16/1942

Township 11 North, Range 1 East

Section 25: W1/2 (133.4 acres)

Section 26: E1/2SW1/4, S1/2SE1/4 (160 acres)

Section 35: E3/4 (480 acres)

Section 36: ALL (640 acres)

Township 10 North, Range 1 East

Section 1: N1/2 (320 acres)

Section 2: Lots 1 – 4 (160 acres)

Encumbrances & Limitations:

- None listed

Grantor: *John and Matilda Rice (158.68 acres)*

Warranty Deed #272615 Book: 29 Page: 26-11-1E Signed: 1/14/1955 Recorded: 1/14/1955

Township 11 North, Range 1 East

Section 26: E1/2NW1/4*, W1/2NE1/4, NW1/4SE1/4

Encumbrances & Limitations:

- None listed
- *deer fence serves as western border

Grantor: *John and Matilda Rice (3.98 acres)*

Quit-Claim Deed #273999 Book: 95 Page: 616 Signed: 1/26/1955 Recorded: 4/8/1955

Township 11 North, Range 1 East

Section 23: Central line of S1/4*

Encumbrances & Limitations:

- None listed
- *deer fence central throughout

Grantor: *Norman and Carrie Salvesen (236.43 acres)*

Warranty Deed #294056 Book: 30 Page: 360 Signed: 9/15/1958 Recorded: 9/23/1958

Township 10 North, Range 1 East

Section 2: S1/2NE1/4, N1/2SE1/4, SE1/4SE1/4, SE1/4NW1/4, NE1/4SW1/4
Encumbrances & Limitations:

- None listed

Grantor: *Elnora Nielson Strikwerda (7.52 acres)*

Warranty Deed #368305 Book: ? Page: ? Signed: 6/23/1972 Recorded: ?

Township 11 North, Range 1 East

Section 26: SE1/4NW1/4

Encumbrances & Limitations:

- None listed

Grantor: *Utah Power & Light Company (48.55 acres)*

Deed #368306 Book: 147 Page: 29-32 Signed: 8/18/1972 Recorded: 8/21/1972

Township 10 North, Range 1 East

Section 2: SW1/4SE1/4* (83 acres)

Section 11: NE1/4NE1/4* (15.7 acres)

Encumbrances & Limitations:

- None listed

*Blacksmith Fork River, Hyrum Power Canal, and Route 101 (Project #0528) form the southwestern border

Grantor: *O. Claude Wennergren (664.36 acres)*

Warranty Deed #464209 Book: 325 Page: 188 Signed: 7/18/1983 Recorded: 11/3/1983

Township 11 North, Range 1 East

Section 13: ALL except for 1 acre in SW corner of NW1/4SE1/4

Encumbrances & Limitations:

- None listed

Grantor: *Valleview Estates (7.91 acres)*

Grant Deed #485240 Book: 367 Page: 516 Signed: 1/14/1986 Recorded: 1/14/1986

Township 11 North Range 1 East

Section 11: S3/4 of E border of SE1/4

Encumbrances & Limitations:

- None listed

Grantor: *Q.B.D.B.G. LLC (23.48 acres)*

Sp. Warranty Deed #626247 Book: 665 Page: 925 Signed: 8/31/1995 Recorded: 9/11/1995

Township 11 North, Range 1 East

Section 23: S1/2 of SE1/4NE1/4*

Encumbrances & Limitations:

- None listed
- *deer fence serves as western border

Grantor: *CELCO, INC. (69.78 acres)*

Sp. Warranty Deed #626248 Book: 665 Page: 927 Signed: 8/31/1995 Recorded: 9/11/1995

Township 11 North, Range 1 East

Section 14: E1/2 of E1/2SE1/4*

Section 23: N3/4 of E1/2NE1/4*

Encumbrances & Limitations:

- None listed
- *deer fence serves as western border