BISON HERD UNIT MANAGEMENT PLAN
BOOK CLIFFS
Unit #10

BOUNDARY DESCRIPTION

Uintah and Grand counties - Boundary begins at the Utah-Colorado state line and the White River, south along this state line to the summit and north-south drainage divide of the Book Cliffs; west along this summit and drainage divide to the Uintah-Ouray Indian Reservation boundary; north along this boundary to the Uintah-Grand County line; west along this county line to the Green River; north along this river to the White River; east along this river to the Utah-Colorado state line (Figure 1).

BOOK CLIFFS LAND OWNERSHIP

RANGE AREA AND APPROXIMATE OWNERSHIP

	Bitter Creek Subunit		**Little Creek Subunit**		**Combined North Subunits**	
Ownership	**Area**	**%**	**Area**	**%**	**Area**	**%**
BLM	612,895	50.8%	1,888	3.3%	614,783	48.6%
SITLA	193,674	16%	48,623	85.1%	242,297	19.2%
DWR	17,028	1.4%	6,607	11.6%	23,635	1.9%
Private	63,103	5.2%	-	0%	63,103	5%
Ute Tribe Trust Land	320,864	26.6%	-	0%	320,864	25.4%
Total	**1,207,564**	**100%**	**57,118**	**100%**	**1,264,682**	**100%**

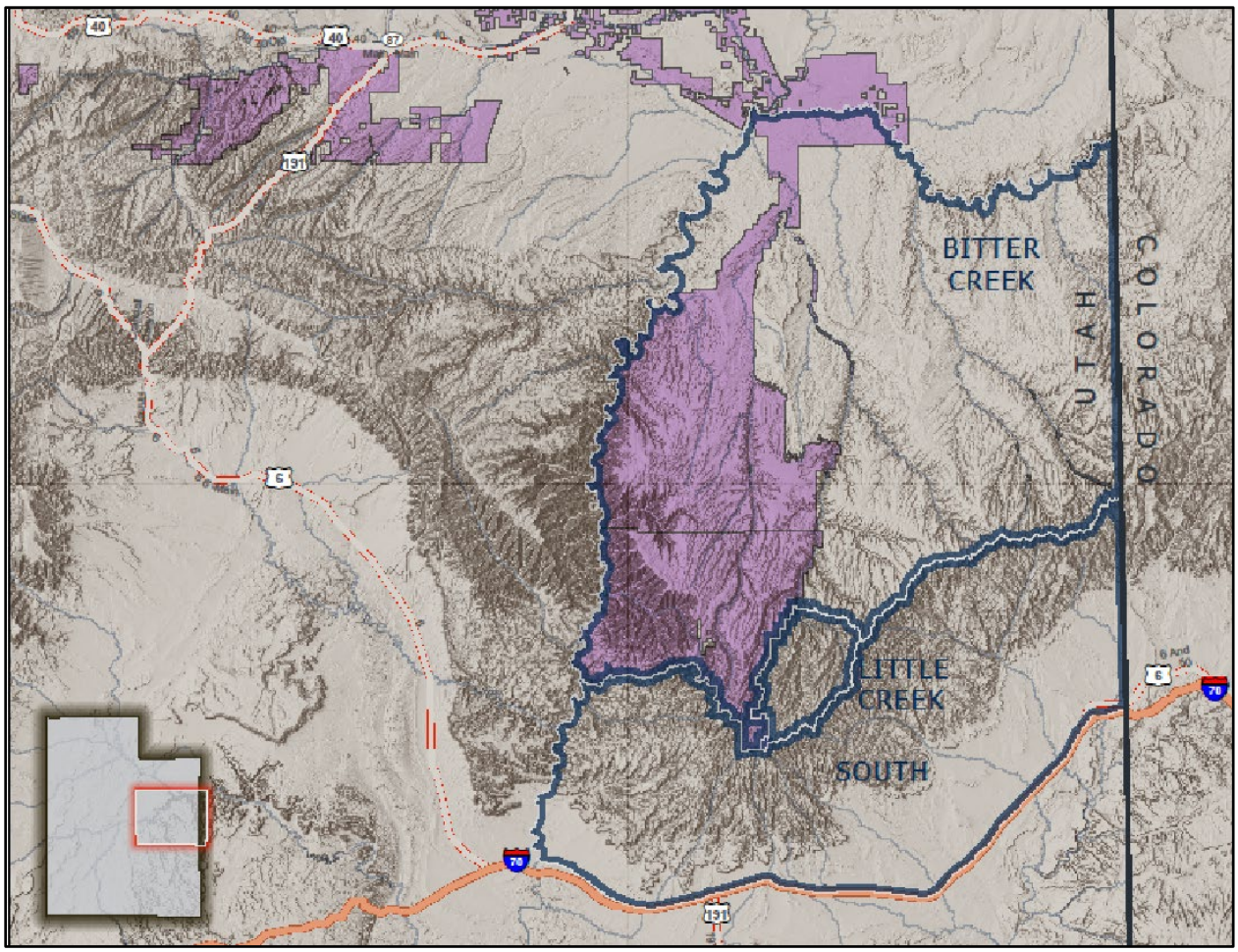

Figure 1. Map of Book Cliffs including subunits.

BOOK CLIFFS BISON HISTORY AND STATUS

Bison were historically present in the general East Tavaputs Plateau and Uinta Basin. The Escalante expedition reported killing a bison near the present site of Jensen, Utah in September 1776. Bison are also commonly depicted in Native American rock art and pictographs found throughout the area. Additionally, at least one bison skull was unearthed in the upper Willow Creek drainage within the Little Creek big game management subunit.

Bison were extirpated from the Book Cliffs until the Ute Indian Tribe reintroduced a herd on the Hill Creek Extension of the Uintah and Ouray Reservation. The initial reintroduction of 6 individuals in 1986 was followed by other Ute Tribal releases to establish a viable herd.

A local rancher and landowner also owned a small private bison herd on his ranch. This herd originated with 12 animals in 1999 and grew to approximately 30 individuals by

2004. Although the animals were largely confined to private land, occasional mixing with Ute Tribe bison occurred. The owner later divested himself of his bison herd through private hunt agreements.

Since their reintroduction by the Ute Indian Tribe, bison repopulated the Hill Creek Extension of the Uintah and Ouray Indian Reservation and naturally extended across historic ranges in the Book Cliffs. The Division viewed this expansion as a rare opportunity to provide a free range, publicly owned and managed bison herd. In 2007, a Book Cliffs bison planning committee was formed to consider the potential of transplanting bison to augment the existing herd and develop a management plan. The management plan was approved by the Utah Wildlife Board in fall 2007 and called for an initial release of 45 bison to supplement the existing herd. In fall 2007, 14 bison from the Ute Indian Tribe were released at Bogart cabin in the roadless area. During January 2009, 40 bison were captured on the Henry Mountains and released at Steer Ridge. After the initial transplants, an additional 40 bison were transplanted from the Henry Mountains and released on Moon Ridge in spring 2010.

As the population expanded across historic ranges, it grew to an estimated 480 wintering adults on state managed lands in 2024 and changed distribution in response to hunting pressure (Figure 2). In 2024 a new Book Cliffs bison planning committee was formed to address current issues and concerns. Committee membership was invited from various stakeholders and interests (Appendix A). The group reviewed bison herd growth, range expansion, animal health and sustainable harvest hunting opportunity. They then helped identify existing or potential issues and endeavored to find acceptable resolutions.

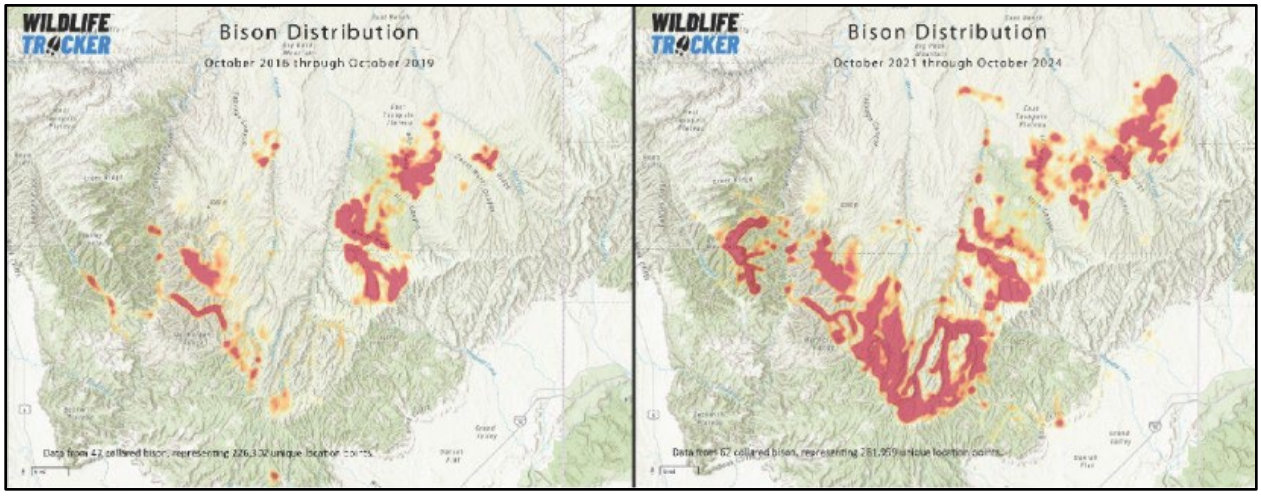

Figure 2. Distribution of collared bison in the Book Cliffs comparing 2016-2019 (left) and 2021-2024 (right).

ISSUE IDENTIFICATION AND RESOLUTION INTENT

Disease

There are several diseases of major concern to bison in Utah, which are brucellosis, tuberculosis (TB), Johne's disease, *Mycoplasma bovis*, bovine virus diarrhea (BVD), and malignant catarrhal fever. They are diseases of concern due to either population level effects or effects to livestock grazing in the same area.

Brucellosis is caused by a bacterium, *Brucella abortus*, and causes abortions, retained placentas, arthritis, male reproductive tract pathology, and bursitis (Rhyan et. al. 2013). Due to intensive efforts of the state and federal governments, brucellosis was eliminated from livestock in the United States except for the Greater Yellowstone Area (GYA). Brucellosis is now considered endemic to bison and elk in the GYA and infects cattle herds periodically. Bison to cattle transmission is possible, but has not been documented in the GYA, due to management efforts to keep cattle and bison separated (Rhyan et al 2013). Brucellosis has not been detected to date in the Book Cliff bison herd.

Tuberculosis, when found in conjunction with brucellosis, can affect the survival and reproductive capabilities of cow bison. Bison are also susceptible to a related disease, paratuberculosis, or Johne's disease. Johne's disease is a viral infection that can have devastating effects on bison resulting in chronic diarrhea and emaciation. Neither disease has been detected in Utah to date.

Mycoplasma bovis is a severe respiratory disease that can cause high mortality in a herd. In the early 2000s, this disease emerged in bison herds around North America. Although most herds affected have been captive bison, it still poses a risk to wild bison since it is a primary pathogen in bison. Bovine viral diarrhea (BVD) is a viral disease that affects ruminants around the world. Bison are susceptible to this virus, and infected individuals can become persistently infected which can lead to infections of other individuals in the herd causing immunosuppression, respiratory disease, reproductive failure, and mortality.

Malignant catarrhal fever (MCF) is the most serious viral disease affecting ranched bison. It is also known to affect other bovine species, domestic sheep and deer. Related to the herpes virus, it is transmitted through lacrimal, nasal, oral and vaginal secretions, but has occurred in other situations and direct contact is not necessary. Bison have contracted MCF from sheep grazed over 2 miles away (Haigh *et. al.* 2002). Wind-borne infections have been reported, and deer contracted the disease after traveling in a truck that carried sheep with MCF. Malignant catarrhal fever is invariably fatal, and there is no vaccine. Prevention requires that sheep do not have contact with susceptible species (Haigh *et. al. 2002*), and

it is generally recommended that domestic sheep herds not be grazed within two miles of bison to protect the population from MCF and Johne's disease.

Preventive measures to ensure disease free bison are used for herd supplementation will include cooperative blood or other testing with the Utah State Department of Agriculture and Food and the Utah State Wildlife Veterinarian. Additionally, blood, tissue or other biological samples will be taken cooperatively and opportunistically until annual hunting occurs. Each year that bison are captured, blood, hair, nasal swabs, feces, or other biological samples are collected and tested for various diseases. In addition, blood sample kits are issued to every hunter to test for brucellosis. Continued prudent livestock management coupled with consistent testing and monitoring of the bison herd should preclude brucellosis or other disease problems in the future. If a problem does develop, an intensive and cooperative disease eradication program will be initiated. Similar testing and monitoring of other significant diseases will also be conducted as warranted.

The Ute Indian Tribe also manages bison in close proximity to the Book Cliff bison. The Ute Indian Tribe attempts a near total round up of their bison each year. Testing efforts reveal that their herd is disease free as well.

Habitat and Forage Competition

There is considerable overlap in the diet of bison and domestic cattle. Nelson (1965) found that grasses and sedges comprised the majority of the bison diet from rumen samples. However, shrubs and forbs were also found, with snowberry being the most common shrub detected in the diet. Van Vuren (1979) reported that both bison and cattle on the Henry Mountains were primarily grazers, but that bison diet consisted of 5% browse, compared to no use by cattle. Cattle, on the other hand, were more likely to use forbs than bison. This is consistent with observations from Wood Bison in British Columbia. Harper *et. al.* (2000) reported that bison are very efficient at digesting low protein, high fiber diets. Willow leaves comprised a significant portion of the diet during the winter. While dietary overlap with cattle is significant, bison may be more likely to use shrubby vegetation during winter periods.

Bison behavior may also provide a degree of spatial separation in ranges used in conjunction with cattle. Nelson (1965) found bison behavior helps limit their direct impact on domestic livestock. First, Nelson found that bison seldom remained in an area longer than 3 consecutive days during the summer growing season. While they did exhibit preferred areas during various seasons, bison were "almost constantly on the move and do not remain in an area until the plants are completely utilized" as domestic cattle are known

to do. Bison on traditional winter ranges were noted to be more sedentary. Second, he reported that free ranging bison did not remain at water sources for extended periods and appeared to have lower water needs than domestic cattle. He noted that bison would water then move off – "…and little time was spent at watering holes." Finally, Nelson also noted that while bison spent most of their time foraging in less steep areas, they did utilize rougher and more broken country than cattle.

Van Vuren (1979) observed similar habits in the Henry Mountains. When comparing habitat use by bison and cattle, he found that over 56 percent of all summer observations of feeding bison were over 10,000 feet, compared to 10 percent of feeding cattle. Both cattle and bison used relatively level areas to graze, but cattle did so more than bison. For example, 65% of bison observations exceeded 21 degrees slope, compared to only 32% of cattle observations. Bison also fed a greater horizontal distance from water than cattle, and cattle grazed in greater numbers in the proximity of water than did bison.

Ranglack and du Toit (2015a) found bison and cattle spatial distributions on the Henry Mountains showed relatively little overlap (29%) because bison used steeper slopes and higher elevations than cattle, which remained close to water sources. These results also align with a concurrent study done by other USU researchers (Ware et al. 2014). Ware et al. (2014) stated that "Although bison and cattle diets are similar, their spatial-temporal use of the landscape varies greatly. Cattle tend to concentrate in areas where water and shade are available, whereas bison are restricted less by these factors (Plumb & Dodd, 1993; Van Vuren 2001; Ware et al., 2014). The behavior that bison exhibit naturally extends grazing beyond that of cattle (Fuhlendorf & Engle, 2001; Ware et al., 2014)." Additionally, in the Henry Mountains, bison caused only modest reductions in forage availability for cattle and that cattle faced more significant forage challenges from lagomorphs than from bison in the study area (Ranglack et al. 2015). Despite these beneficial behavioral differences in free roaming bison, their population distribution will largely determine the degree of direct forage competition with livestock. Hunting can be an effective tool to limit the size of bison groups that may develop conflicting habits. However, Nelson suggested providing salt and periodically harassing bison to encourage movement to areas less competitive with cattle. He also reported that Henry Mountain bison were sensitive to disturbance.

Bison will also share some dietary overlap with elk. As with livestock, bison population distribution will determine the overall competitive overlap with elk. The same management considerations previously discussed for bison and livestock would also apply to elk.

Dietary overlap of bison and mule deer is less but could conceivably occur on shared winter ranges; especially if heavy and severe winters rendered grass forage unavailable to bison. The balance between various wild ungulate populations will be determined through

individual species management plans for the herd unit. These are reviewed and approved through the public RAC and wildlife board process and involve public input and discussion. Vegetation, watershed and habitat monitoring will help form the basis for the future population objective recommendations of each species.

Wildlife forage allocations present under the BLM's Resource Management Plan (RMP) in addition to SITLA grazing permits in DWR ownership and DWR administered Wildlife Management Area fee title lands provide a sufficient forage base for big game. The cooperatively achieved goals of the Book Cliffs Conservation Initiative partners have presented a means to offer a public bison resource opportunity in conjunction with other big game resources. Should future grazing and forage competition issues arise, the Division is committed to addressing them. Continued rangeland work will help address any issues that arise with a particular focus on chaining, mastication, and burning pinyon–juniper woodland - remote from watering points (Ranglack and du Toit 2015b). Cooperative range and habitat improvement projects of which the Division has been a major participant have been completed or proposed on over 200,000 terrestrial acres and over 800 aquatic/riparian acres in the past 20 years (Figure 3). Appendix B provides a table of rangeland projects completed and proposed from 2005 through 2025.

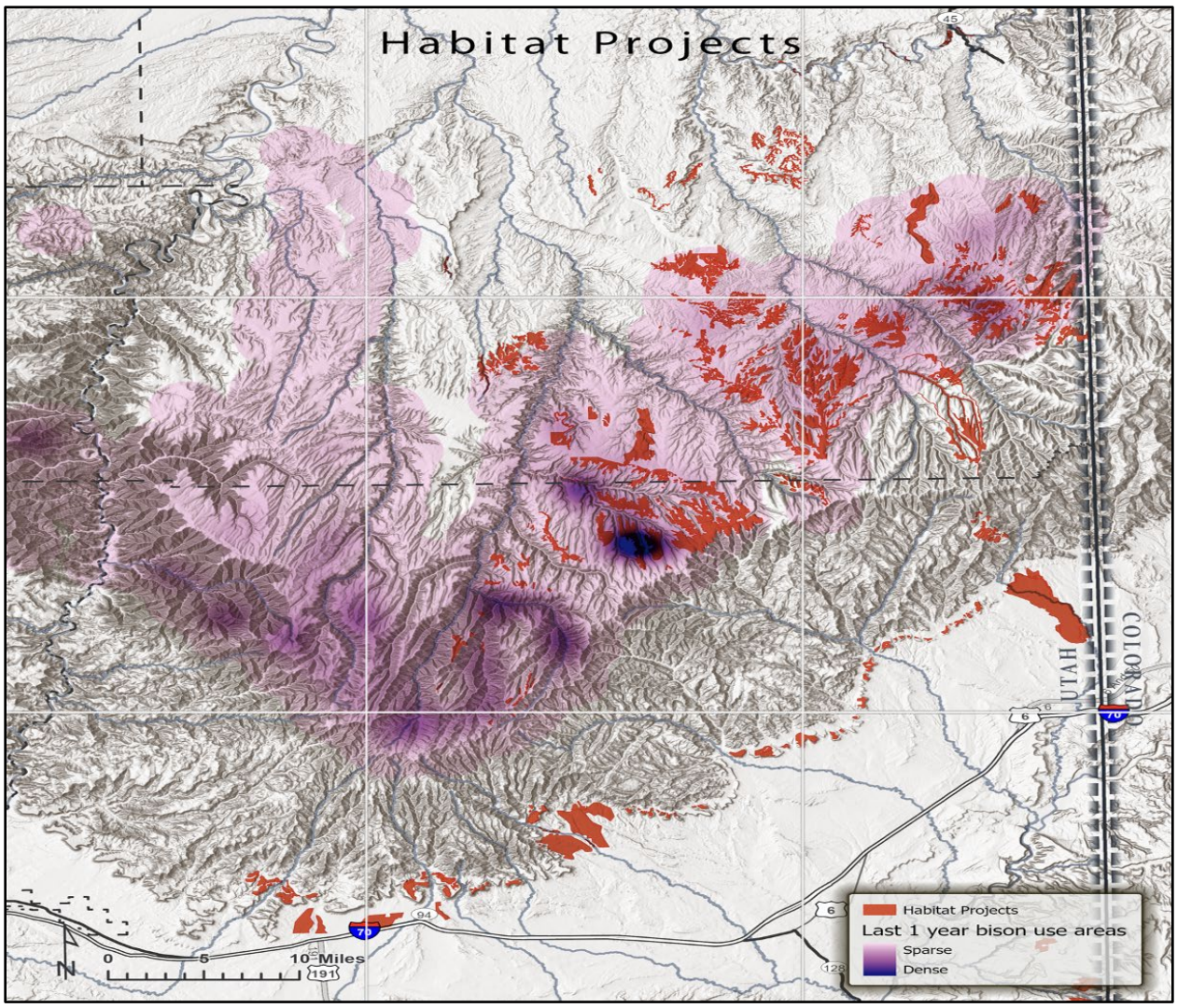

Figure 3. Habitat projects completed for the benefit of bison overlaid with recent bison use areas.

Agricultural Depredation

Fortunately, from the standpoint of bison management, the Book Cliffs have few opportunities for extensive agricultural crop damage. Aside from rangelands, private agricultural fields that are irrigated and harvested are currently limited to the lower Willow Creek Drainage. Harvested crops are currently grass hay, which are either cut, baled, and hauled off or left standing as livestock pasture forage. Elk depredation occurs in these areas, and any complaints are addressed through stack yard fencing, payments for damages, or mitigation type hunting opportunities. Landowners also have opportunity for compensation by selling buck deer and bull elk hunting permits within the Book Cliffs Landowners Association and Cooperative Wildlife Management Unit programs. Bison that

currently use the Willow Creek drainage have utilized agricultural fields to some extent. However, their visits have generally not been of such impact or long duration to elicit heavy complaints. If agricultural depredation issues arise, they will continue to be addressed under the Utah State Code, DWR policy, and established guidelines. The Division also owns agricultural fields in Bitter Creek, Willow Creek and Meadow Creek that were procured under the Book Cliffs Conservation Initiative. While agricultural sharecrop agreements are utilized in some areas, these lands are dedicated for wildlife use.

Population Dynamics

In the late 1970's and early 1980's, Van Vuren and Bray (1986) estimated the natural survival of bison on the Henry Mountains at 95% for unmarked males ≥ 2 years of age, 96% for unmarked females ≥ 2 years of age, and 94% for unmarked calves using life table methods. More recent research by Utah State University from 2011 to 2014 based on GPS and VHF radio collars estimated annual survival probability for HM bison that are ≥ 1.5 years of age = 0.982 (95% C.I. 0.966 to 0.998, Koons and du Toit 2015). In addition, USU found no evidence for differences in survival across years, age, or sex classes. USU did not attempt to estimate annual calf survival rates. Additionally, due to the low number of natural mortalities (only 5 collared animals in 4 years), it is not possible to accurately assess differences in natural mortality causes. Regardless, in the Henry Mountains, bison appear to be quite robust with very high annual survival and minimal natural mortality, with most mortality due to regulated hunting. Given the proximity and similarity in habitat types, annual bison survival on the Book Cliffs is expected to be similarly high for all sex and age classes with minimal natural mortality.

Given the high survival rates, bison populations in Utah are more likely driven by variation in calving rates and calf recruitment than adult survival. Indeed, when exploring various metrics explaining historic population variations, researchers at Utah State University found the model allowing for temporal variation in both fecundity and juvenile survival, constant sex-specific adult survival, and an age of primiparity (AP) equal to three best predicted historic population dynamics. Additionally, Koons et al. (2012) found that 1-year lagged annual precipitation had a positive effect on recruitment. A further analysis by Koons et al. (2015) revealed early spring temperatures also had a positive but lagged effect on population growth, which was much stronger than effects of precipitation and other temperature related variables. Presumably, the lagged effects of spring temperature and precipitation affect vegetative growth and/or animal nutritional condition, which in turn may influence adult pregnancy rates and milk production, as well as juvenile birth weights and survival rates. Although relatively weak, population density was found to have a

negative effect on bison population growth on the Henry Mountains, and this effect seemed to be more severe during drier conditions (Koons et al. 2012, Koons et al. 2015).

As mentioned previously, currently natural mortality sources are not limiting bison populations in Utah. This is particularly true when examining impacts from large mammalian predators. Although bison predation by mountain lions, black bears, and coyotes has been documented in the literature, none are considered to be a significant threat to bison herds. However, wolves, although not currently present in Utah, do have the potential to kill bison (Smith et al. 2000, MacNulty et al. 2014). Wolf populations in states north of Utah have been expanding, and Colorado recently reintroduced wolves in 2023. The Utah Wolf Management Plan was drafted and will guide any future management potential for this species.

Recreation and Aesthetics

Outdoor recreational activities have increased dramatically over the past two decades. Types of human related recreation in bison habitat include backcountry travel, mountain biking, ATV use, horseback riding, shed antler gathering, camping, backpacking, hiking, trail races, hunting of big game, cougar and bear, and others. Another popular activity has been outdoor educational schools that take large groups of youth into the backcountry to learn survival and leadership skills.

Part of the mission of the Division of Wildlife Resources is to manage protected wildlife for its intrinsic, scientific, educational and recreational values. Wildlife management, including bison, certainly benefits from and adds to many recreational activities. Broad-based public support is realized when individuals or groups have the opportunity to observe or photograph bison in a wild setting. Funding for management is derived from the sale of hunting permits. Each year, the Division issues conservation permits to conservation groups who sell the permits to the highest bidder. These funds are used to enhance habitat or fund special projects, such as transplants or research. Bison population size is controlled through hunting and is an integral part of protecting fragile range resources.

Preserving and maintaining the primitive western aura and mystique of the Book Cliffs was one of the integral goals driving the Book Cliffs Conservation Initiative at its inception in 1990 (UDWR et al. 1990). Inclusive in the concept of the Initiative was to "… assure public access and recreational opportunities for future generations. Establish the Book Cliffs, within the Vernal District of the BLM, as a multiple use showcase area. The intent is to demonstrate a management commitment to the area's unique ecological values." The

Initiative proposal also emphasized increased wildlife density and diversity of which bison were specifically included. The Initiative was developed as a publicly involved cooperative venture from the outset with as many goals and objectives as could be envisioned, briefly written and defined. Public acceptance and support is profound as evidenced by initial success in achieving habitat acquisition goals and in the continued economic growth, habitat improvement, and enhanced resource management emphasis.

A healthy bison population in balance with other multiple-use natural resources will add to all aspects of outdoor recreation in the Book Cliffs.

UNIT MANAGEMENT GOALS AND OBJECTIVES

A. **Population Management Goal:** Manage a publicly owned bison herd within the Book Cliffs big game management unit. Manage for a population of healthy animals capable of providing a broad range of public use opportunities, including sustainable harvest and viewing. Balance the bison population with human needs, such as authorized livestock grazing permits, private land development rights and local economies. Maintain the population at a level that is within the long-term habitat capability.

Objective 1: Work toward achieving a postseason population size of 650 adult (age 1+) bison distributed across the Bitter Creek (250), Little Creek and South (400) subunits of the Book Cliffs Wildlife Management Unit.

Strategies:

1. Conduct helicopter surveys to monitor herd distribution and growth.
2. Conduct annual ground classification counts to determine annual calf production and bull:cow ratios.
3. Utilize population modeling or estimates derived from research or surveys to estimate post-season herd size.
4. Utilize public hunting as the principal population management tool.
5. Utilize the United States Drought Monitor (https://droughtmonitor.unl.edu) to make temporary adjustments in the bison population size depending on drought severity and range conditions. If drought-related conditions and bison densities

negatively impact habitat, recommend additional bison permits to the Wildlife Board.

6. Collect blood and other biological samples from hunter-harvested bison to monitor for disease and take necessary actions to maintain brucellosis-free status in compliance with Department of Agriculture guidelines.
7. Conduct law enforcement efforts to minimize illegal take of bison.
8. Address agricultural depredation problems consistent with state code and DWR policy.
9. Maintain working collars within the herd to monitor survival.
10. Monitor disease indicators such as mortalities, low birth rates, and population decline in the herd and address as needed.

Objective 2: Maintain a ratio of 50 bulls per 100 cows to ensure older age class bulls remain in the population.

Strategies:

1. Conduct annual ground classification counts during the rut to determine bull:cow ratio.
2. Use a combination of hunter's choice and cow only permits and removal of animals for transplant to maintain desired bull:cow ratio.
3. Require cow only permit holders to complete an orientation course each year to educate them on how to properly identify the sex of the animal.

B. **Habitat Management Goal:** Provide quality habitat to establish and maintain a healthy bison population in the Book Cliffs.

Objective 1: Maintain or improve sufficient bison habitat to allow herds to reach population objectives.

Strategies:

1. Identify critical bison use areas and work with land managers and private landowners to improve or maintain habitat quality in these areas.
2. Support cooperative agreements between agricultural producers and other management interests to help minimize utilization impacts by all ungulates and to better manage range resources.
3. Utilize the Utah Watershed Restoration Initiative to prioritize and fund range and resource improvement and development on areas utilized by bison. The Division may assist by providing materials or manpower when available.
4. Work with stakeholders to minimize the negative impacts of feral horses and cattle.

Objective 2: Achieve bison population distribution that effectively utilizes available habitat and minimizes conflict.

Strategies:

1. Utilize the Utah Watershed Restoration Initiative to improve forage quality throughout bison range in order to encourage herd distribution.
2. Address all depredation problems in a timely and efficient manner.
3. Develop and maintain water sources in areas that will improve herd distribution.
4. Utilize strategic and focused public hunting pressure to prevent habitat overutilization and to move bison from areas of conflict.
5. Maintain working GPS collars within the herd to help better understand spatial use patterns.
6. In cooperation with the BLM and SITLA, work with livestock operators to consider realignment of grazing allotments to improve distribution of both cattle and bison.
7. Collaborate with neighboring jurisdictions and strive for mutually beneficial management strategies.

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Appendix A

2024 Book Cliffs bison unit management plan committee members and representation.

Wade Garrett - Farm Bureau

Trisha Hedin - Elected Official

Kent Johnson - Wildlife Board

Troy Justensen - Sportsmen

Clay McKeachnie - Rancher

Alesha Melton - Sportsmen

Jason Mountainlion - Ute Tribe

Kevin Richins - Sportsmen

Clint Sampson - DWR

Slate Stewart - SITLA

Terrell Thayne - Agriculture

Ben Williams – BLM

Appendix B

Habitat treatments for benefit of bison since 2005.

Project	Terrestrial Acres	Riparian Acres
McCook/Monument Fire	6,000.00	-
Diamond Fire Reseeding	88,000.00	-
Horse Pt. Lop/Scatter	900.00	-
Bitter Creek Greasewood Treatment	450.00	-
N Wolf Pt Lop/Scatter	2,000.00	-
Big Park Phase 2, 3, 4 Lop/Scatter	3,000.00	-
Horse Pasture Lop/Scatter	650.00	-
Big Park Lop and Scatter	1,010.40	-
McCook Ridge P/J Removal	794.43	-
Monument Ridge PJ Removal	1,003.71	-
Seep/Winter Ridge P-J Removal	734.20	-
V-Canyon Ridges Lop and Scatter Project	1,065.49	-
Wolf Point Lop and Scatter	810.75	-
Blue Knoll Lop and Scatter	1,091.16	-
Indian Springs Ridge Bullhog	320.01	-
McCook Ridge Phase II P/J removal	538.93	-
Meadow Creek Low Whitetop Control	117.04	-
North Big Park Lop and Scatter	944.57	-
Winter Ridge Phase III Lop and Scatter	1,987.97	-
Winter Ridge-Little Asphalt P-J Removal	673.42	-
Wolf Point Phase II P/J Removal	1,322.67	-
Agency Draw Lop and Scatter	2,347.55	-
Blue Knoll Phase 2	1,999.26	-
Indian Ridge Lop and Scatter	1,000.71	-
Three Pines Lop and Scatter	1,942.58	-
Winter Ridge Bullhog	474.08	-
Big Park Plateau Project	140.60	-
Blind Canyon Fire Rehabilitation	2,131.91	-
Cedar Camp Lop and Scatter	2,041.83	-
Cherry Mesa Bullhog	575.81	-
Indian Springs Bullhog Phase 2	351.26	-
Johnson Draw Chaining	81.49	-
McCook Ridge Cheatgrass Control	384.13	-
McCoy Reservoir Lop and Scatter	1,059.68	-
Park Ridge Bullhog	497.65	-
Pine Springs Bullhog	554.75	-
Archy Bench P-J Project	1,121.62	-
Augusi Canyon Fire Rehabilitation	955.38	-

Big Park Sagebrush	64.83	-
McCook Ridge Bullhog FY11	498.14	-
Monument Ridge Bullhog - FY2011	503.67	-
Park Ridge Bullhog Phase II	498.06	-
Rock Spring/Cherry Mesa Lop and Scatter	716.56	-
Rock Springs Bullhog	553.03	-
Seep Ridge Bullhog	203.87	-
Upper McCook Lop and Scatter	603.49	-
Archy Bench Sagebrush Restoration	606.87	-
Boulevard Ridge Pinyon and Juniper Removal	392.25	-
Buck Camp Canyon P-J Project	212.79	-
Indian Ridge Sagebrush	224.04	-
Moonshine Ridge Mountain Browse Enhancement	361.06	-
Seep Ridge Bullhog Phase II	389.87	-
Seep Ridge Chaining	321.86	-
Atchee Ridge Lop and Scatter Phase II	483.30	-
Bottom Canyon Bullhog Phase II	415.80	-
Cedar Camp Lop and Scatter Phase II	869.62	-
Moonshine Bullhog Phase II	619.59	-
Seep Ridge Phase II/Bullhog Maintenance	729.03	-
Wolf Den - Rector Ridge Fire Rehabilitation	2,228.82	-
Wolf Den Fire-Rainbow	525.52	-
Indian Springs Bullhog Maintenance	610.22	-
Jack Trap Canyon	334.39	-
Little Jim Bullhog	668.77	-
Moon Ridge Chaining	540.88	-
Moonshine Bullhog Phase III	426.24	-
Park Ridge Bullhog Maintenance	474.04	-
Pine Springs Bullhog Phase II	494.83	-
She Canyon Stream Restoration	-	29.69
Steer Ridge Lop and Scatter	566.19	-
Tom Patterson Rx Line Preparation	47.49	-
White River Russian Olive Removal	48.47	-
Burnt Timber Bullhog	648.96	-
Indian Spring Phase I Maintenance	319.40	-
Red Leaf Reclamation	0.32	-
White River Enhancement Project	-	122.91
Burnt Timber Bullhog Phase II	441.84	-
Meadow Creek Stream and Riparian Restoration	-	6.74
Monument Ridge Bullhog Phase I & II	1,010.90	-
Monument Ridge Slashing	1,019.70	-
Moon Ridge Chaining Maintenance	692.27	-
Seep Ridge Chaining Maintenance	332.49	-
Book Cliffs Bison Habitat Enhancement	1,006.26	-

Book Cliffs Divide Lop and Scatter	2,684.47	-
Boulevard Ridge Pinyon and Juniper Removal	932.17	-
Meadow Creek Riparian Restoration FY2018	-	15.40
White River Enhancement Project Phase 2	92.12	-
White River Enhancement Project Phase 3	241.11	-
Book Cliffs Weed Treatments	1,091.48	-
Monument Ridge Bullhog II	2,081.02	-
Augusi Bullhog	691.94	-
Book Cliffs Bison Habitat Enhancement Cherry Mesa	499.81	-
Monument Ridge Bullhog III	993.31	-
Pine Springs Forest Health	137.84	-
Pine Springs Ponderosa	74.35	-
White River Enhancement Project Phase 4	-	15.11
Willow Creek WMA Aquatic/Terrestrial Improvement	38.67	7.15
Weed Inventory and Treatment	12,102.64	-
White River Enhancement Project Phase 5	-	16.54
White River Enhancement Project Phase 6	-	44.57
Book Cliffs Tamarisk Control (Phase 1)	217.44	-
Book Cliffs West Water Developments/Spike Treatment	461.14	-
East Willow BDAs and Guzzlers	-	18.89
Pine Springs Ponderosa II	200.24	-
Seep Ridge Maintenance Lop & Scatter	8,304.54	-
White River Enhancement Project Phase 7	-	20.53
Willow Creek BDAs and Wet Mowing Phase 2	147.50	7.35
Indian Spring and Augusi Bullhog	501.73	-
South Book Cliffs Phase 10 (San Arroyo Bullhog)	655.85	-
Tom Patterson Herbicide	2,297.74	-
Willow Watershed Improvements FY2023	3,810.50	30.30
Monument Wildfire Rehab - Seeding	51.39	-
Willow Watershed Improvements FY2024	1,218.34	187.41
Lower White River Conservation, Restoration,	-	68.53
Weed Inventory and Herbicide Treatment FY24	2,081.02	-
Willow Watershed Habitat Improvements FY25	25.22	-
Lower White River Conservation, Restoration,	-	9.93
Bitter Creek Habitat Restoration Project	30.46	-
Agency Draw Lop & Scatter 2025	3,468.21	-
Bitter Creek Cutthroat Trout/Riparian Improvement	-	9.78
Book Cliffs Wildlife Habitat Improvements	1,811.80	189.61
Tom Patterson Mastication	3,651.77	-
Winter Ridge FY 25	6,853.58	-
Monument Wildfire Shrub Seeding	94.82	-
Total	**210,324.99**	**800.44**