Management Evaluation Report
Callaghan Wild Horse Complex
March 14th, 2025

BLM

Mount Lewis Field Office

Untied State Department of the Interior
Battle Mountain District
Mount Lewis Field Office
50 Bastian Rd
Battle Mountain Nevada, 89820
(775) 635-4000

Page Left Intentionally Blank.

Table of Contents

Page Left Intentionally Blank.

Introduction

The Callaghan Wild Horse Complex (Complex) consists of the Bald Mountain, Callaghan, South Shoshone, Hickison (north of US Highway 50) Herd Management Areas (HMA), and the North Shoshone Herd Area (HA). The North Shoshone HA is managed for zero wild horses; therefore, it will not be analyzed in the Herd Management Area Plan (HMAP). The Complex lies entirely within Lander County, Nevada. The Complex expands from approximately 7 miles south of Battle Mountain to approximately 6 miles north Austin. The western and eastern boundaries of the Complex are SR-305 and Grass Valley Road, respectively. The Complex encompasses approximately 1,145,515 acres and includes areas that span between HMA boundaries where wild horses reside. See Map 1.

The Complex terrain varies from level valleys to steep, rugged mountains, with elevations ranging from 4,800 feet at the valley floor to 8,500 feet on the mountain peaks. The highest point in the Complex is Mount Callaghan at 10,200 feet. Climate within the complex is characterized by warm dry days, cool nights and low yearly precipitation that ranges from 5 inches at lower elevations to approximately 16 inches at higher elevations. Temperatures in the Complex range from excess of 100 degrees in the summer and negative 20 in the winter.

The Shoshone-Eureka Resource Area (SERA) Resource Management Plan (RMP) dated March of 1986 established initial Appropriate Management Level (AML) at existing wild horse populations, established management objectives, set Short-Term Management Actions and defined Standard Operating Procedures. The Mount Lewis Field Office (MLFO) issued formal decisions affirming or adjusting AMLs through the Final Multiple Use Decisions (FMUD). The FMUDs establishing AML for the Callaghan Complex are as follows:

- Austin Allotment FMUD, January 13th, 1995
- Carico Lake Allotment FMUD, September 30th, 2005.
- Grass Valley Allotment FMUD, June 21st, 2002.
- Kingston and Simpson Park Allotments FMUD, September 30th, 2005.

Table 1: HMA Information and Decisions

HMA	Acres	AML	Decision(s)
Bald Mountain HMA	139,875	129-215	Carico Lake FMUD
Callaghan HMA	133,093	134-237	Grass Valley FMUD
Hickison HMA (North)	17,485	0	Kingston and Simpson Park FMUD
South Shoshone HMA	156,156	60-100	Carico Lake and Austin FMUDs

The MLFO is proposing to manage these HMAs as a complex. Proposed management is being developed to manage, protect, and control healthy wild horse populations within established AML in a manner designed to achieve and maintain a thriving natural ecological balance and multiple-use relationship on public lands.

Wild Horse Population Characteristics

Approximately 4,500 excess wild horses have been removed from the Callaghan Complex since 1981. All current information shows the populations are thriving and have not been negatively impacted by past gather operations.

BLM has conducted many gathers throughout the Complex since 1981. In 2009 and 2011, population growth suppression treatments (porcine zona pellucida [PZP] vaccine) were implemented in the Bald Mountain and Callaghan HMAs (See Table 2).

Genetic testing was completed in the Complex in 2002 (Callaghan HMA Grass Valley, and Callaghan HMA Hall Creek / Austin allotment), 2008 (South Shoshone HMA) and 2009 (Bald Mountain HMA, Callaghan East Grass Valley, and Callaghan HMA West)[1]. Genetic samples (blood, or hair follicles) were analyzed by Dr. E. Gus Cothran, Department of Veterinary Science, Texas A&M University. No genetic variants were observed that have not been seen in horse breeds, and the herds appeared to be of highly mixed ancestry. Based on those reports and subsequent analyses, genetic variation, as indicated by heterozygosity, in the Callaghan Complex was at or well above the feral mean when compared to other wild horse herds. A 2024 analysis across many wild horse herds identified genetic evidence of direct gene flow between Callaghan HMA, Bald Mountain HMA, Roberts Mountain HMA, South Shoshone HMA, New Pass-Ravenswood HMA, and Rocky Hills HMA (Table 4 in Cothran et al. 2024[2]). With the high level of genetic variability and with the high likelihood of genetic exchange among herds in the Complex and other nearby HMAs, the level of genetic diversity loss per generation should be far lower than the level targeted in BLM wild horse and burro herd management handbook H-4700-1 (2010).

The 2013 National Academies of Sciences report to the BLM Wild Horse and Burro program[3] included other evidence that shows that wild horses in the Callaghan Complex are not genetically

---

[1] Cothran, E.G. 2003. Genetic analysis of the Grass Valley allotment, Callaghan, NV feral horse herd. Report to the BLM from University of Kentucky Department of Veterinary Science.
Cothran, E.G. 2003. Genetic analysis of the Hall Creek (Austin allotment), NV feral horse herd. Report to the BLM from University of Kentucky Department of Veterinary Science.
Cothran, E.G. 2010. Genetic analysis of the South Shoshone HMA, NV. Report to the BLM from Texas A&M University Department of Veterinary Integrative Bioscience. *{BLM notes: misspelled HMA name is in the title}*
Cothran, E.G. 2010. Genetic analysis of the Bald Mountain HMA, NV. Report to the BLM from Texas A&M University Department of Veterinary Integrative Bioscience.
Cothran, E.G. 2010. Genetic analysis of the Callaghan East HMA, NV. Report to the BLM from Texas A&M University Department of Veterinary Integrative Bioscience.
Cothran, E.G. 2010. Genetic analysis of the Callaghan West HMA, NV. Report to the BLM from Texas A&M University Department of Veterinary Integrative Bioscience.

[2] Cothran, E.G., A. Khanshour, S. Funk, E. Conant, R. Juras, and B.W. Davis. 2024. Genetic dynamics of Mustang and Feral Horse Populations in the Western United States. BioRxiv doi.org/10.1101/2024.01.28.577652.

[3] National Research Council of the National Academies of Sciences (NAS). 2013. Using science to improve the BLM wild horse and burro program: a way forward. National Academies Press. Washington, DC.

unusual, with respect to other wild horse herds. Specifically, Appendix F of the 2013 NAS report is a table showing the estimated "fixation index" (Fst) values between 183 pairs of samples from wild horse herds, including the sample sets that were available up to the time of that report. Fst is a measure of genetic differentiation, in this case as estimated by the pattern of microsatellite allelic diversity analyzed by Dr. Cothran's laboratory. Low values of Fst indicate that a given pair of sampled herds has a shared genetic background. The lower the Fst value, the more genetically similar are the two sampled herds. Values of Fst under approximately 0.05 indicate virtually no differentiation. Values of 0.10 indicate very little differentiation. Only if values are above about 0.15 are any two sampled subpopulations considered to have evidence of elevated differentiation (Frankham et al. 2010[4]). While the specific number of other sample sets that each of the six sample sets from the Callaghan Complex varies somewhat, overall the pairwise Fst values were lower than 0.05 between Callaghan Complex wild horses and a very large number of other sample sets. Specifically, Fst was under 0.05 with 139 other herds for Bald Mountain HMA, 130 for Callaghan Grass Valley, 147 for Callaghan HMA Austin allotment, 148 for Callaghan HMA East Grass Valley, 123 for Callaghan HMA Hall Creek, and 127 for South Shoshone HMA. These results suggest that herds in the Complex were extremely similar to between two thirds and four fifths of other BLM-managed herds, supporting the interpretation that the Callaghan Complex horses are components in a highly connected metapopulation that includes horse herds in many other HMAs.

Table 2: Past Removals, Releases, and Fertility Control Numbers.

HMA	Year	Removed	Released	Treated
Bald Mountain	2011	62	114	54
	2009	511	64	32
	1982	364	0	0
Callaghan	2011	119	135	55
	2009	825	80	40
	2002	855	0	0
	1997	1,066	338	0
	1987	471	0	0
South Shoshone	2008	319	55	0
	2002	47	0	0

Table 3 was created using formal wild horse and burro population data, as well as ground-based observations and estimates in years a formal inventory was not conducted. Estimates reflect the total number of wild horses not just adult horses. These numbers include wild horses residing both in and out of HMA boundaries. Populations estimates of wild horses residing outside of HMA boundaries are included with their associated HMA. Small groups of wild horses have been observed during inventory flights in the northern portion of the Hickson HMA. However, those groups have not been considered within the population of the Hickson HMA since it is managed for wild burro not wild horses. These horses have been considered as outside HMA animals.

[4] Frankham, R., J. D. Ballou, and D. A. Briscoe. 2010. Introduction to conservation genetics, second edition; chapters 3 & 14. Cambridge University Press, New York, New York.

Table 3: Estimated Wild Horse Populations in the Callaghan Complex since 2009.

Year	HMA	Estimated Population
2024	Bald Mountain	205
	Callaghan	787
	South Shoshone	1,971
2023	Bald Mountain	940
	Callaghan	1,147
	South Shoshone	2,034
2022	Bald Mountain	839
	Callaghan	1,024
	South Shoshone	1,812
2021	Bald Mountain	796
	Callaghan	971
	South Shoshone	1,723
2020	Bald Mountain	669
	Callaghan	814
	South Shoshone	1,148
2019	Bald Mountain	562
	Callaghan	684
	South Shoshone	1,217
2018	Bald Mountain	508
	Callaghan	602
	South Shoshone	858
2017	Bald Mountain	427
	Callaghan	425
	South Shoshone	721
2016	Bald Mountain	359
	Callaghan	425
	South Shoshone	606
2015	Bald Mountain	334
	Callaghan	512
	South Shoshone	476
2014	Bald Mountain	281
	Callaghan	430
	South Shoshone	400
2013	Bald Mountain	211
	Callaghan	322
	South Shoshone	282
2012	Bald Mountain	179
	Callaghan	279
	South Shoshone	298
2011	Bald Mountain	160
	Callaghan	249
	South Shoshone	259
2010	Bald Mountain	135
	Callaghan	264
	South Shoshone	220
2009	Bald Mountain	152
	Callaghan	157
	South Shoshone	103

The most recent aerial inventory for the Complex was conducted in February of 2025. BLM is still awaiting population analysis for this inventory. Population estimates for 2025 will be included in the forthcoming National Environmental Policy Act (NEPA) documentation.

Relationship to Statutes, Regulations, Policies, or Plans

Land Use Plan Level Management Decisions for wild horse and burro management within the Mount Lewis Field Office were outlined in the SERA RMP 1986. Some of these determinations were interim management decisions until HMA level decisions could be issued establishing AML. Those decisions were issued with subsequent FMUDS. The goals and objectives for these decisions are as follows:

SERA RMP 1986

Objectives:

1) *To manage viable herds of sound, healthy wild horses in a wild and free-roaming state.*
2) *To initially manage wild horse populations at existing numbers. Based on 1982 aerial counts and determine if this level of use can be maintained.*
3) *To manage wild horses within the areas which constituted their habitat at the time the Wild and Free-Roaming Horse and Burro Act became law in 1971.*

Short-Term and Long-Term Management Actions:

1) *Manage for approximately 3,660[5] wild horses in 14 herd management areas in the short-term[6].*
2) *Develop and implement wild horse herd management area plans on New Pass-Ravenswood, Bald Mountain and Fish Creek herd areas in the short-term.*
3) *Construct six water development projects to benefit wild horses.*
4) *Continue existing rangeland monitoring studies and, establish new studies as necessary to determine what adjustments in wild horse numbers are needed to meet the objectives of this plan.*
5) *Develop additional wild horse herd management area plans in the long-term.*

Austin Allotment FMUD 1995[7]

Set an AML of 415 AUMs for the Austin allotment portion of the Callaghan HMA and an AML of zero for the Austin Allotment portion of the South Shoshone HMA.

[5] The original text in the 1986 SERA RMP included the following footnote, "This includes 348 wild horses in Augusta and Desatoya HMAs that extend into two adjoining BLM districts and 363 additional wild horses that are outside HMAs within the resource area."

[6] Initial AML was established based on existing population numbers as monitored during 1982 aerial counts. These initial AML determinations were updated through Final Multiple Use Decisions (FMUD).

[7] The Grass Valley Allotment FMUD (2002) incorporates the AML set under this decision as part of the AML Range for the overall Callaghan HMA.

Table 4: AML table provided in the 1995 Austin Allotment FMUD.

	RMP ALLOCATION	***AVERAGE ACTUAL USE***	***Needed Reductions***	***Available AUMs***	***AML***
Whole Allotment		*3,725 AUMs*	*3,301 AUMs*	*424 AUMs*	
Callaghan HMA	*3,720 AUMs*			*415 AUMs*	*415 AUMs*[8]
South Shoshone HMA	*84 AUMs*			*9 AUMs*	*0 AUMs*

Carico Lake Allotment FMUD 2005

Management Decision:

1) *Establish an Appropriate Management Level range for wild horses within the Bald Mountain Herd Management Area of 129-215 (1,548-2,580 AUMs) wild horses year-round.*
2) *Establish an Appropriate Management Level range for wild horses within the South Shoshone Herd Management Area of 60-100 (720-1,200 AUMs) wild horses year-round.*

Grass Valley Allotment FMUD 2002

Management Decisions:

1) *Set AML of 163 wild horses (maximum) for the Grass Valley Allotment Portion of the Callaghan HMA.*
2) *Set the AML range of 120-198 wild horses for the Grass Valley and Austin Allotment Portions*[9] *of the Callaghan HMA.*

Kingston and Simpson Park Allotments FMUD 2005

Management Decisions:

1) *Establish an Appropriate Management Level Range for wild horses within the Simpson Park Allotment portion of the Callaghan Herd Management Area of 14 to 39 wild horses (166-468 AUMs). The establishment of AML for the Simpson Park Allotment will set the Callaghan HMA AML*[10] *as a range of 147 to 237 wild horses (1,764-2,844 AUMs).*
2) *Establish an Appropriate Management Level range for wild burros within the Kingston Allotment Portion of the Hickison HMA. The AML range for the Kingston Allotment will be 11-30 wild burros (55-150 AUMS) for 5 months.*

[8] An Animal Unit Month (AUM) is the amount of forage to sustain one horse for one month. 415 AUMs would sustain 35 wild horses over a twelve-month period. AML is now commonly described as the number of Wild Horses or Burros.

[9] The Austin FMUD (1995) established an AML of 35 wild horses for the Austin Portion of the Callaghan Complex. That AML was carried forward under this decision and added to the high AML of 163 for the Grass Valley Portion of the HMA.

[10] Previous AMLs were established within the Austin and Grass Valley Portions of the Callaghan Complex in 1995 and 2002 respectively.

3) *Establish an Appropriate Management Level range for wild burros[11] within the Simpson Park and Kingston Allotment portions of the Hickison HMA. The AML range for the Simpson Park Allotment will be 5 to 15 wild burros (25-75 AUMs) for 5 months.*

Federal Land Policy and Management Act of 1976 (FLPMA)
FLPMA generally requires that an action under consideration be in conformance with the applicable BLM land use plan(s), and be consistent with other federal, state, and local laws and policies to the maximum extent possible.

Wild Free-Roaming Horses and Burros Act of 1971 (WFRHBA)
The statute requires the BLM to protect the range from deterioration associated with overpopulation (16 U.S.C. § 1333(b)(2)) and defines excess animals as wild and free-roaming horses and burros that must be removed from an area in order in order to preserve and maintain a thriving natural ecological balance and multiple-use relationship in that area (16 U.S.C. § 1332(f)). It also directs the BLM to maintain a current inventory of wild free-roaming horses and burros on public lands. The purpose of the inventory shall be to: make determinations as to whether and where an overpopulation exists and whether action should be taken to remove excess animals; determine appropriate management levels or wild free-roaming horses and burros on these areas of public land; and determine whether appropriate managements should be achieved by the removal or destruction of excess animals, or other options (such as sterilization, or natural control on population levels) (16 U.S.C. § 1333(b)(1)).

BLM Regulations at 43 C.F.R. Part 4700
- 43 C.F.R. § 4700.0-6 (a): Wild horses shall be managed as self-sustaining populations of healthy animals in balance with other uses and the productive capacity of their habitat (emphasis added).
- 43 C.F.R. § 4710.4: Management of wild horses and burros shall be undertaken with the objective of limiting the animals' distribution to herd areas. Management shall be at the minimum level necessary to attain the objectives identified in approved land use plans and herd management area plans.
- 43 C.F.R. § 4720.1: Upon examination of current information and a determination by the authorized officer that an excess of wild horses or burros exists, the authorized officer shall remove the excess animals immediately…
- 43 C.F.R. § 4720.2: Upon written request from a private landowner……the Authorized Officer shall remove stray wild horses and burros from private lands as soon as practicable.
- 43 C.F.R. § 4740.1(a): Motor vehicles and aircraft may be used by the authorized officer in all phases of the administration of the Act, except that no motor vehicle or aircraft, other than helicopters, shall be used for the purpose of herding or chasing wild horses or burros for capture or destruction. All such use shall be conducted in a humane manner.

[11] The Hickison HMA does not have an established AML for wild horses. Furthermore, the HMA is divided by US-50 which is fenced on both sides of the right-of-way. Wild burros have not been observed on the north side of US-50 during inventory flights. However, a small group of wild burros has been observed north of the highway, from the ground, several times since 2023.

(b) Before using helicopters or motor vehicles in the management of wild horses or burros, the authorized officer shall conduct a public hearing in the area where such use is to be made.

In *Animal Protection Institute*, 118 IBLA 63, 75 (1991), the Interior Board of Land Appeals found that under the WFRHBA, the BLM is not required to wait until the range has sustained resource damage to reduce the size of the herd. Instead, proper range management dictates removal of "excess animals" before range conditions deteriorate in order to preserve and maintain a thriving natural ecological balance and multiple-use relationship in that area.

Water Resources

Water resources in the Callaghan Complex are scattered throughout the Callaghan Complex. Natural seeps and springs range in size from small seeps to large meadow complexes. Similarly, perennial, and intermittent streams are also present within the complex and are commonly spring fed and snow melt driven systems, respectively. These areas typically occupy a small percentage of the landscape but are disproportionately important centers for biodiversity. They often provide the only available source of water for many miles, and are used by wild horses, livestock, birds, and many types of wildlife. Wild horses use these areas year-long, resulting in degradation and decreased functionality of wetlands and riparian zones if excess numbers of wild horses are present.

Much of the current Callaghan Complex wild horse populations are dependent on range improvements, which provide water in troughs fed by well or spring sources. These sources are few but are some of the only sources that are available during periods of exceptional and severe droughts. As a result of wild horse populations consolidating on these water sources, grazing permittees have needed to take non-use on their permitted grazing use.

Vegetation Resources

Vegetation types are distributed according to topography, elevation and associated precipitation. Within the highest elevations, and subsequently the greatest precipitation, the vegetation consists primarily of pinyon-pine and juniper trees, mountain-mahogany, and low sagebrush. The lower and drier elevations consist of saltbush, greasewood, sagebrush, and a variety of annual and perennial grasses and wildflowers.

In the Great Basin high desert of Nevada, the average annual precipitation is often less than 11 inches (which defines the term desert). Drought conditions occur as frequently as 6 out of every 10 years. Drought is defined by the Society of Range Management as "…prolonged dry weather when precipitation is less than 75% of the average amount" (SRM 1989).

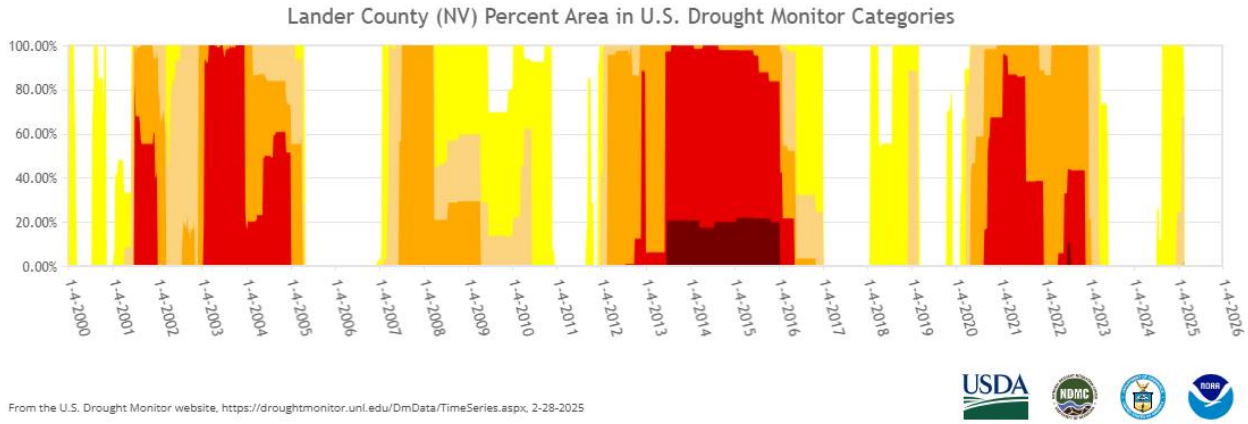


Figure 1: US Drought Monitor. Percent area of Lander County (NV) experiencing drought. Accessed on U.S. Drought Monitor. D4: Exceptional Drought, D3: Extreme Drought, D2: Severe Drought, D1: Moderate Drought, D0: Abnormally Dry. https://droughtmonitor.unl.edu/

Other Resources

Mining

Mining actives occur throughout the Callaghan Complex including mineral exploration projects and small-scale mining operations are found throughout the Complex. However, no large-scale operations fall within the Complex or HMA boundaries.

Wildlife

The Callaghan Complex provides habitat for many species of wildlife, including large mammals like mule deer and pronghorn antelope. Winter and summer habitat for mule deer occurs throughout the Complex. Crucial winter range for mule deer covers the majority of the Bald Mountain HMA. Most of the Complex is designated as year-round pronghorn habitat with small areas of winter range and pronghorn movement corridors occurring within the northern portion of the Hickison HMA. Wintering, breeding, nesting, foraging, and brood rearing habitats for sagebrush obligate bird species like Greater sage-grouse, sage thrasher, sage sparrow and Brewer's sparrow are found throughout the Complex.

Predominant habitat types within the Complex that are likely to support migratory birds include: aspen, mountain riparian, mountain shrub, sagebrush, pinyon/juniper, salt desert scrub, playa and cliffs/talus habitat types. There are small inclusions of coniferous forest and mountain mahogany habitat types included in the upper elevations.

Wildfire

The Callaghan Complex is considered to have an overall high burn probability and high fire risk compared to other areas within the Battle Mountain District. This suggests that there is a higher likelihood of large or frequent fires within the Callaghan Complex. This area exhibits Fire Regime Condition Class II and III areas where there is a moderate to high departure from the natural (historical) regime of vegetation characteristics, fuels composition, and fire frequency. Factors such as vegetation types, topography, local climate conditions, and past disturbances contribute to this increased fire risk.

The South Shoshone HMA has experienced a relatively higher frequency of wildfires when compared to areas of similar historic vegetation types, with 13 fires occurring between 1985 and 2016, covering a total of 103,888 acres in total. The Bald Mountain HMA has seen slightly more fire occurrences with 16 fires recorded from 1996 to 2024, but with only a total of 8,883 acres burned. The Callaghan HMA had 14 fires from 2000 to 2024, with 8,883 acres burned within the HMA boundary.

The Callaghan Complex currently is subject to chronic overgrazing by excess wild horses, so any potential benefits from grazing to wildfire mitigation are far outweighed by the detrimental effects of the overgrazing that is currently occurring within the Complex. The year-long grazing pressure presented by wild equids and the inability to control where wild horses graze makes use of these herds for targeted grazing (for wildfire prevention) unviable. An overpopulation of wild horses can encourage a downward trend in rangeland health and provide for the spread of invasive species such as annual grasses, which can increase fire risk.

Existing Conditions

Range Resources

As outlined in the 1994, 2002, and 2005 SDDs, the allowable use level is 50% of the current year's growth by weight for yearlong use of the species. Utilization will be measured at established key grazing areas or other sites representative of the dominant vegetation in the allotment. Examples of key riparian grasses or grass-like species are sedge, rush, spike-rush, bluegrass species, redtop (bentgrass), and timothy.

Proper Functioning Condition (PFC)

Since 2019, PFC has been conducted at 18 riparian sites, streams and meadows, across the Callaghan Complex both within HMA boundaries and areas outside HMAs where wild horses reside. In total, 8 lotic and 10 lentic sites were evaluated. Twelve of the observed sites were rated as Functional at Risk (FAR) and six were rated PFC. A downward trend in riparian function was common across the Complex.

Observations common throughout the Complex include but are not limited to: hoof action from both livestock and wild horses, stunted growth of riparian vegetation due to drought and over utilization, increased soil erosion, and loss of bank stability. Many riparian meadows also appear to be shrinking.

Forage Utilization

The BLM collected utilization data across the Callaghan Complex, the key forage species monitored include Sandberg's Bluegrass (*Poa secunda*), Indian ricegrass (*Achnatherum hymenoides*), crested wheatgrass (*Agropyron cristatum*), Thurber's needlegrass (*Achnatherum thurberianum*), and squirreltail (*Elymus elymoides*). Utilization monitoring was conducted under the Height Weight Method (TR-1734-3) and Key Species Method (TR1734-3).

Utilization data was collected over the last 10 years at several Key Areas (KAs) within the Complex. There are areas where wild horses are consolidating and heavy to severe utilization is widespread. Many of these KAs were primarily utilized by wild horses, though signs of livestock

utilization were also apparent. Numerous sites and many roads throughout the Complex showed extensive wild horse trailing and stud piles.

Sites are heavily impacted by wild horses and have largely transitioned to an annual state dominated by cheatgrass (*Bromus tectorum),* halogeton *(Halogeton glomeratus),* clasping pepperweed (*Lepidium*), curveseed butterwort (*Ceratocephala testiculata*), and Russian thistle (*Salsola kali L.).* Several sites were dominated by Yellow rabbitbrush (*Chrysothamnus viscidiflorus*), an indication of historic overutilization. While some new growth of both grasses and shrubs was observed at most KAs, plant vigor for those individual plants exhibiting heavy to severe utilization was lower than would otherwise be expected. Many sites have exhibited severe to total loss of key perennial species.

Range Improvements

Water Developments – Water development projects may be fed by springs sources or from a well and may supplied in troughs on site or piped to multiple trough locations. Many of the water developments throughout the Complex have fallen into despair due to damage caused by wild horses. Livestock operators are often responsible for maintaining these developments. Livestock operators have continued to maintain several of these projects despite not being able water their own livestock. They have decided to continue maintaining these projects as they are often the only available water source for wild horses. Without these sources, a widespread die off would be likely. Repeated repairs and affects to their grazing rotations have are a financial burden to operators. It is anticipated this issue will continue to become more severe as wild horse populations continue to increase.

SR 305 Fence – Since December 2022, the MLFO has responded to an increased number of reports of wild horses on State Route 305 near the South Shoshone HMA. In this period of time, the BLM has responded to approximately 15 reports to remove animals for the highway right of way and return them to the HMA. BLM, livestock operators, and the Nevada Department of Transportation have made numerous repairs to right-of-way fence to reduce the public safety hazards caused by wild horses.

Harry Canyon Fence – This fence was constructed in 1987 and doubles as the northern boundary of the South Shoshone HMA and the Carico Lake Grazing Allotment. Over the years, damage to this fence has allowed wild horses to move north out of the South Shoshone HMA in search of water and forage resources. Permittees in the adjacent Argenta Allotment have become increasingly concerned as more horses have begun to translocate outside the HMA. One grazing operator is permitted for domestic horse use in the southwest portion of the Argenta Allotment and has been forced to take non-use to prevent his herd from becoming incorporated with the migrating wild horses. Project wide maintenance on the fence was conducted by the livestock operator in late 2017 and early 2018. BLM staff made minor repairs in 2022.

Livestock Grazing

The Complex includes portions of five grazing allotments. Permitted livestock use includes both cattle and sheep. Permitted grazing use has generally been reduced from historical grazing levels over the past decades in a majority of the allotments. This has been in part due to persistent

drought, competition with wild horses for forage and water, and the needs of livestock operations.

Table 5: Percent of HMA that overlaps Allotments within Complex

Allotment	Bald Mountain HMA	Callaghan HMA	Hickison HMA (North)	South Shoshone HMA
Austin		51%		11%
Carico Lake	100%			89%
Grass Valley		42%		
Simpson Park	7%	49%	49%	

Several livestock operators have taken voluntary non-use over the years citing both drought and over population of wild horses as reasons for their reduction in grazing. Active permitted use in the Complex has averaged approximately 48.04% percent of permitted use over the last ten years.

The BLM continues to evaluate allotments for achievement of Rangeland Health Standards, and adjustments to livestock grazing are implemented as appropriate, as grazing term permits are renewed or through annual coordination between BLM and grazing permit holders. Livestock grazing is administered through the regulations at 43 C.F.R. Part § 4100 and must be consistent with multiple use allocations set forth in RMPs and with Rangeland Health Standards and Guidelines. Changes to livestock grazing cannot be made with a wild horse management decision.

In Table 6, Animal Unit Month (AUM) means the amount of forage necessary for the sustenance of one cow or its equivalent for a period of 1 month. 43 C.F.R. § 4100.0-5.

Table 6: Permitted AUM by Allotment and 10-year average billed active livestock AUM

Allotment	Permitted AUMs	Average Billed Active AUMs	% Active Billed Used
Austin	14,478	6,458	45%
Carico Lake	24,954	12,783	51%
Grass Valley	17,701	9,783	55%
Simpson Park	3,446	2,247	65%
Total	**60,576**	**31,271**	**52%**

Photos of Existing Range Conditions

Photo 1: August 2nd, 2023. Lentic PFC Smith Flat, South Shoshone HMA. Heavy utilization on riparian vegetation and hoof action.

Photo 2: October 7th, 2021. *Alex Spring, Callaghan HMA. Excessive bare ground and bank alterations.*

Photo 3: September 26th, 2017. Key Area CL-13 Carico Lake Allotment, Bald Mount HMA. Vegetative disturbance and wild horse sign.

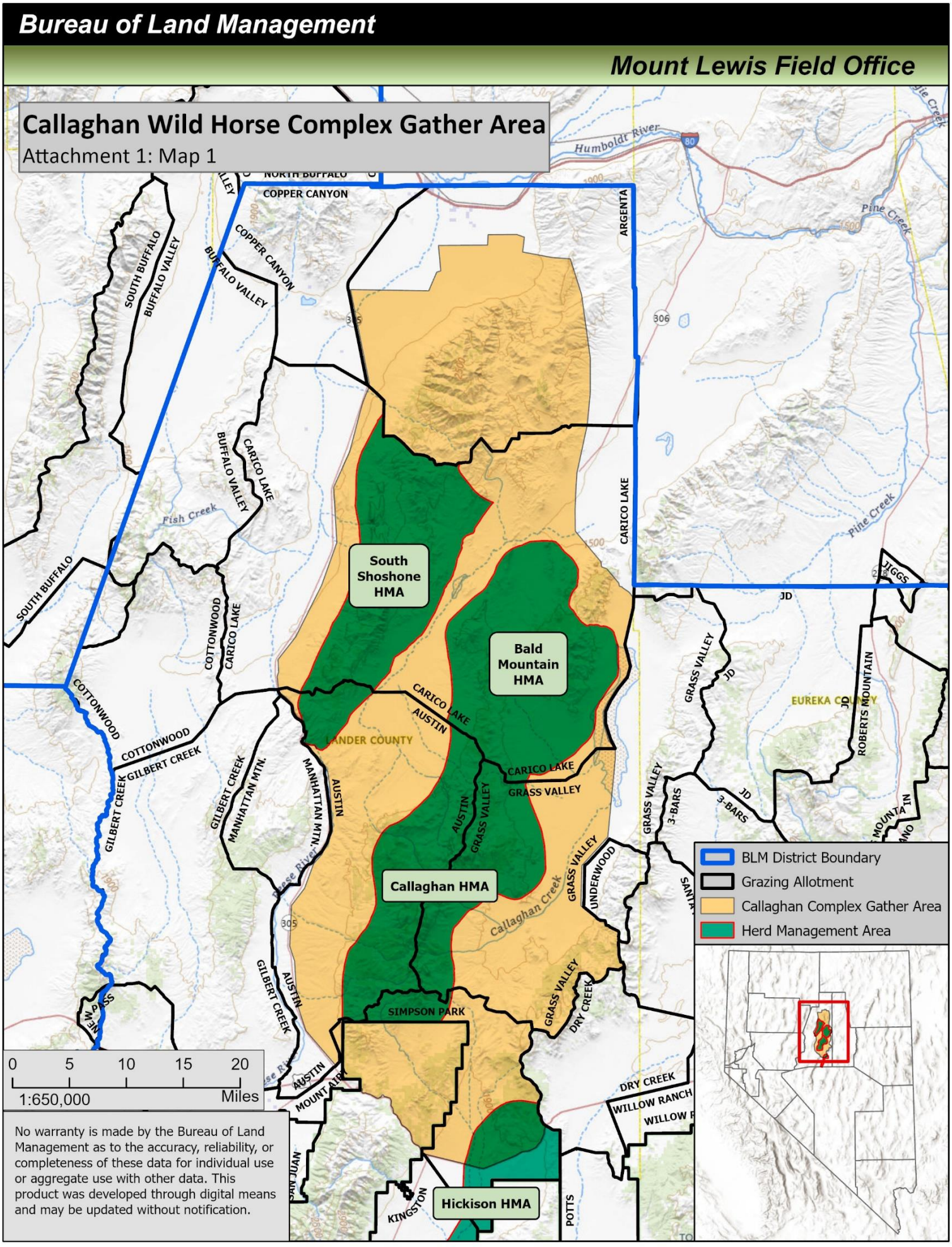
Photo 4: February 24th, 2025. Wild horses outside of the Callaghan HMA and excessive trailing.

Management Considerations

The key components for maintaining a healthy wild horse population are forage, water, cover, and space. Cover and space are plentiful for wild horses in the Callaghan Complex. Forage and water availability are generally the limiting factors and are particularly limited in preferred wild horse use areas and during extended periods of severe drought coinciding with high wild horse numbers.

Future Management
The BLM intents to prepare the Callaghan Complex Herd Management Area Plan (HMAP) to guide to management of the wild horses and burros and their habitat into the future. The HMAP will address the following management objectives:

- Manage wild horses within HMAs at AML.
- Assure rangeland and riparian health.
- Utilize population growth suppression methods.
- Maintain adequate levels of genetic diversity.
- Maintain Greater sage-grouse habitat.
- Other issues as identified.


Bureau of Land Management
Mount Lewis Field Office
Callaghan Wild Horse Complex Gather Area
Attachment 1: Map 1
South Shoshone HMA
Bald Mountain HMA
Callaghan HMA
Hickison HMA
BLM District Boundary
Grazing Allotment
Callaghan Complex Gather Area
Herd Management Area
0 5 10 15 20
1:650,000 Miles
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data. This product was developed through digital means and may be updated without notification.