ELK HERD UNIT MANAGEMENT PLAN Elk Herd Unit #4 MORGAN-SOUTH RICH 2023

BOUNDARY DESCRIPTION

Morgan, Rich, Summit and Weber Counties - Boundary begins at I-80 and the Utah-Wyoming state line; west on I-80 to Echo Junction and I-84; west on I-84 to SR-167 at Mountain Green (Trappers Loop Road); north along SR-167 to SR-39; east along SR-39 to Woodruff and SR-16; southeast on SR-16 to the Utah-Wyoming state line; south along the state line to I-80.

UNIT MANAGEMENT GOALS

- Manage for a population of healthy animals capable of providing a broad range of recreational opportunities, including hunting and viewing
- Consider impacts of the elk herd on other land uses and public interests, including private property rights, agricultural crops, and local economies
- Maintain the elk population at levels that allow for healthy mule deer populations on shared yearround ranges
- Work to protect and improve existing habitat through a variety of strategies to maximize the number of animals the unit can support
- Build and maintain professional relationships with Cooperative Wildlife Management Unit (CWMU) operators and landowners across the unit to achieve population objectives

UNIT MANAGEMENT OBJECTIVES

Habitat -

- (HO1) Make efforts to prevent development on winter range.
- (HO2) Reduce noxious weeds and restore damaged winter ranges to healthy native vegetation.
- (HO3) Educate landowners on the negative impacts feeding has on habitat and encourage them to stop feeding. For those who insist on feeding, encourage them to implement feeding strategies that reduce negative impacts to winter range.
- (HO4) Protect and enhance summer range on private and public property by increasing quality and quantity of summer range forage and encouraging optimal animal distribution across the landscape with water improvements.
- (HO5) Protect and facilitate elk seasonal migration across roads and private/public land.

Population -

- (PO1) Manage the population to a target winter herd size of 4,200 elk. This is an increase of 400 elk from the previous plan, in which the objective was 3,800.
- (PO2) Maintain a healthy bull:cow ratio that maximizes hunting opportunity while maintaining high quality bulls on CWMUs.
- (PO3) Determine annual recruitment and status of the population.

Bull Elk Harvest Objectives - As per the Statewide Elk Management Plan, harvest strategies are used to provide diverse hunting opportunities for the public. The subunit specific harvest strategies are as follows:

• Morgan-South Rich - This is a general season any bull hunting unit.

CURRENT STATUS OF ELK MANAGEMENT

Habitat - The summer range of the Morgan-South Rich unit maintains stable habitat conditions, yet the winter range is showing signs of deterioration and susceptibility to development. The ongoing rapid pace of development in Morgan County raises significant concerns for elk management on the unit. Fortunately, a pivotal property, crucial for elk, has recently been safeguarded through a conservation easement in Morgan County, precluding any future development. Additionally, a handful of other properties within the unit have been secured under conservation easements in the past few years. The Division will continue to evaluate conservation easements to benefit elk and elk management as opportunities become available in the interest of the long-term sustainability of elk populations on the unit.

The combination of high elk densities, annual winter elk feeding by landowners, and consecutive years of drought has led to the degradation of portions of the winter range. These areas have experienced significant loss of their shrub species, including sagebrush and bitterbrush, being replaced by cheatgrass and other non-native grass species. To revitalize these areas to quality winter range, a combination of restoration efforts and favorable climatic conditions is imperative. Although some areas have received extensive damage, several private landowners have actively enhanced habitat conditions for both livestock and wildlife which has proven advantageous for elk across summer and winter ranges. They have developed springs, built catch basins, seeded their property with favorable plant species, implemented stream restoration practices and improve their livestock grazing techniques, which benefit elk. UDWR and other partners have worked to restore and improve more than 7,600 acres of habitat on the Morgan-South Rich unit since the elk plan was last revised eight years ago.

	Yearlong Range		Summer Range		Winter Range	
Ownership	Area (acres)	%	Area (acres)	%	Area (acres)	%
Forest Service	0	0	21,700	7.3	15,943	6.4
Bureau of Land Management	0	0	5,023	1.7	22,523	9
Utah State Institutional Trust Lands	0	0	632	0.2	3,123	1.2
Private	0	0	265,436	89	192,549	78
Utah Division of Wildlife						
Resources	0	0	5,194	1.7	12,196	5
TOTAL	0	0	298,309	100	246,532	100

Range Area and Approximate Ownership

Habitat Projects Completed and Proposed 2016-2023

Henefer-Echo Road Shed Fire Rehab	336 acres
Northern Region Browse Scalping	22 acres
Henefer-Echo WMA Fire Canyon Rehab	1,385 acres
Henefer WMA Browse Scalping and Fence	370 acres
Northern Region WMA Browse and Water Enhancement	235 acres
Henefer WMA Browse Scalping and Pipeline Arc Clearance	223 acres
Lost Creek Discretionary Seed for Deer	18 acres
Henefer-Echo Boundary Fence	NA
Henefer-Echo WMA Fire Rehabilitation	27 acres
Wolf & Mud Spray/Reseed	124 acres
HEWMA Pond Restoration and Fencing	2 acres

Northern Region WMA Annual Browse Enhancement	5 acres
Water Hollow Fire Reseeding	164 acres
Dairy Ridge Sagebrush Treatment	406 acres
Eli Ridge Pipeline	NA
Cornia's Middle Ridge Ranch	640 acres
Stacey's Wonderful Water	NA
Meachum Canyon Stage 1 Juniper Removal	1,809 acres
Home Ranch Bullhog	1,866 acres
Last Stretch Water System	NA

Population - More than 70% of the land on the Morgan-South Rich unit is currently enrolled in a CWMU. This program has not only increased the tolerance landowners have for wildlife, but has created a desire for landowners to hold large numbers of elk on their property. While occasional human conflicts with depredation, livestock competition, wildlife-vehicle collisions and ornamental damages occur, especially in harsher winters, CWMUs have helped mitigate some of these issues and consequently, the overall social tolerance for elk is extremely high. The Morgan-South Rich may be the first unit in the state to have a higher social tolerance for elk, than what the habitat can support.

Managing an elk population on a unit that is primarily comprised of private property, with most landowners eager to have more elk, presents unique challenges. The unit consistently exceeds objective, and cooperation from CWMUs is necessary to achieve the objective. Achieving sufficient antlerless harvest has proven to be a persistent challenge for years and merely adding more permits has not consistently resulted in increased elk harvest. The current objective, set at 4,200 elk, was determined to be sustainable based on the balance between harvest and recruitment. The combined average harvest of public land hunts and the number of elk CWMUs are willing and capable of harvesting needs to align with the amount of elk recruited annually to avert population expansion beyond manageability. It is important to note that this objective does not surpass biological thresholds. However, potential reductions may become necessary if significant portions of winter range continue to be lost or degraded further, or winter elk feeding on Deseret Land and Livestock or Durst Mountain ceases.

The population estimate in December 2022 was 6,700. Record snowfall and extended cold temperatures occurred in winter of 2022/23. The elk population experienced 10% mortality and the deer population experienced 80% mortality. It is evident from the high mortality rates that the unit exceeded biological carrying capacity, and there is a clear need to reduce the elk population. The unit typically has a bull:cow ratio greater than 80 bulls:100 cows. The average annual bull harvest is 469 and the average annual cow harvest is 517. Population and harvest statistics are shown below.

Year	Population Estimate	Bull Harvest	Antlerless Harvest
2003	4,300	393	153
2004	4,100	451	438
2005	5,100	459	426
2006	4,502	447	664
2007	3,800	485	649
2008	4,400	276	366
2009	3,800	369	563
2010	3,500	444	662
2011	5,000	454	451

2012	5,000	550	599
2013	5,000	553	671
2014	4,100	546	491
2015	3,800	576	540
2016	3,850	565	625
2017	4,100	476	335
2018	3,650	572	441
2019	6,500	478	452
2020	6,900	482	500
2021	6,800	340	594
2022	6,700	463	727

STRATEGIES FOR REMOVING BARRIERS AND REACHING UNIT MANAGEMENT OBJECTIVES

Habitat - Strategies that may be used to achieve the objectives. These are linked with the (HO) number to the objectives listed above. Additional strategies may also be implemented as new options become available and needs arise.

- **(HO1)** Encourage landowner enrollment in conservation easements, the walk-in access program, the CWMU program, and other incentivized programs that motivate property owners to maintain their land for the benefit of wildlife.
- **(HO1)** Allocate current funds and collaborate with sportsmen groups to secure additional funding for the acquisition of land within critical winter range when opportunities arise.
- (HO2) Combat annual grasses with chemical treatments in winter range understory.
- (HO2) Implement seeding and shrub planting.
- (HO2) Use mechanical treatments to revitalize decadent shrub stands and open up the understory of oakbrush stands.
- (HO2) Redirect run-off with on-contour furrows on more gradual slopes from flowing directly out of a system and out to the ridges to increase soil moisture.
- (HÓ3) Stay up to date on feeding literature and provide that information to landowners.
- (HO4) Implement controlled burns or other mechanical treatments in areas where conifer encroaches aspen stands.
- (HO4) Reintroduce or augment current beaver populations or use BDAs to raise water tables to maintain higher forage protein content longer into the summer and fall.
- (HO4) Establish new water sources and improve existing ones, such as catch basins, guzzlers, and springs.
- (HO5) Collaborate with UDOT and private landowners to build exclusionary fences on roads with high mortality.
- (HO5) Improve range fencing to be more permeable to elk along migration corridors.

Population - Strategies that may be used to achieve the objectives. These are linked with the objectives above via the (PO) numbers. Additional strategies may also be implemented as new options become available and needs arise.

- (PO1) Implement a variety of antlerless hunts, including but not limited to CWMU antlerless, public draw antlerless, private lands only, mitigation, and antlerless control.
- (PO1) Work closely with CWMU operators and landowners to garner support and effort towards appropriate levels of antlerless harvest.
- (PO1) Use "outside-of-the-box" thinking on ways to reduce elk numbers on large tracts of private land when the population exceeds biological carrying capacity.
- (PO1) Alter season dates and permit numbers to achieve sufficient antlerless harvest.
- (PO2) Implement new hunt strategies, including but not limited to, late season bull hunts, restricted weapons hunts, and private lands only bull permits.

- (PO2) Encourage CWMU's to increase harvest on bulls, with an emphasis on taking management (non-trophy) bulls.
- (PO3) Collect and use preseason classification data, collar survival data, harvest survey data, and winter aerial survey data to determine population estimates.

Duration of This Management Plan - This Unit Management Plan was revised in 2023 following the revision of the Statewide Elk Management Plan. This Unit Management Plan will be revised after the next Statewide Elk Management Plan revision to ensure all current management tools are being used. CWMU operators and landowners requested a mid-plan review and revisions may take place when improved data or management tools become available, or to address future issues. Unit elk plan goals, objectives, and strategies are constrained within the sideboards set in the Statewide Elk Plan, which supersedes unit plans. It is possible that changes to the Statewide Elk Plan may affect unit plans. Additionally, changes to Utah State Code and/or Administrative Rule may also affect elk unit plans.