ELK HERD UNIT MANAGEMENT PLAN Elk Herd Unit 11 Nine Mile December 2023

BOUNDARY DESCRIPTION

Carbon, Duchesne, Emery and Uintah counties--Boundary begins at US-40 and US-191 in Duchesne; southwest on US-191 to US-6; southeast on US-6 to I-70; east on I-70 to Exit 164 and SR-19 near the town of Green River; north and west on SR-19 to Hastings Road; north on this road to the Swasey boat ramp and the Green River; north along this river to the Duchesne River; west along this river to US-40 at Myton; west on US-40 to US-191 in Duchesne. EXCLUDES ALL NATIVE AMERICAN TRUST LANDS WITHIN THIS BOUNDARY.

This boundary includes two subunits:

11A - Nine Mile, Anthro-Myton Bench Duchesne and Uintah counties--Boundary begins at Duchesne and US-191; southwest on US-191 to the Argyle Canyon road; southeast on this road to the Nine Mile Canyon road; east along this road to its end near Bulls Canyon; south from the end of this road to Nine Mile Creek; east along this creek to the Green River; north along this river to the Duchesne River; west along this river to US-40; west on US-40 to US-191 at Duchesne. EXCLUDES ALL NATIVE AMERICAN TRUST LAND WITHIN THIS BOUNDARY.

11B - Nine Mile, Range Creek Carbon, Duchesne, and Emery counties--Boundary begins at exit 164 on I-70 near the town of Green River west on I-70 to US-6 north and west on US-6 to US-191 north on US-191 to Argyle Canyon Road southeast on this road to Nine Mile Canyon Road east on this road to its end near Bulls Canyon and Nine Mile Creek east along this creek to the Green River south along this river to Swasey's Boat Ramp and the Hastings Road south on this road to SR-19 south and east on SR-19 to Exit 164 on 1-70 near the town of Green River. EXCLUDES ALL NATIVE AMERICAN TRUST LAND WITHIN THIS BOUNDARY.

LAND OWNERSHIP

The following tables show land ownership of seasonal elk habitat by subunit. Approximately 75,448 of the private acres in elk habitat in the Range Creek subunit are managed as Cooperative Wildlife Management Units (CWMU). They comprise portions of summer, winter, and yearlong ranges.

APPROXIMATE ELK HABITAT AND OWNERSHIP WMU 11A, ANTHRO

	Yearlong range		Summer Range		Winter Range	
Ownership	Area (acres)	%	Area (acres)	%	Area (acres)	%
Forest Service	12,401	8	57184	95	30116	19
Bureau of Land Management	120,019	76	1050	2	21346	13
Utah State Institutional Trust Lands	19,681	12	225	<1	2442	1
Native American Trust Lands	748	<1	0	0	56296	36
Private	4,988	3	1446	2	40644	26

Utah Division of Wildlife Resources	0	0	0	0	7562	5
TOTAL	157,838	100	59905	100	158406	100

APPROXIMATE ELK HABITAT AND OWNERSHIP WMU 11B, RANGE CREEK

	Yearlong range		Summer Range		Winter Range	
Ownership	Area (acres)	%	Area (acres)	%	Area (acres)	%
Bureau of Land Management	126778	51	43097	27	253027	83
Utah State Institutional Trust Lands	26876	11	8866	5	26537	9
Private	92765	37	103344	64	24459	8
Utah Division of Wildlife Resources	1564	1	5316	3	0	0
TOTAL	247983	100	160623	100	304038	100

UNIT MANAGEMENT GOALS

Manage for a population of healthy animals capable of providing a broad range of recreational opportunities including hunting and viewing. Maintain an elk population consistent with available range resources that is in balance with other range uses such as livestock grazing and watershed protection. Consider impacts of the elk herd on other land uses and public interests including private property rights, agricultural crops and local economies.

Maintain and enhance existing elk habitat through vegetative manipulation, sound domestic grazing practices, and other management techniques that will meet habitat objectives. Minimize and mitigate any habitat losses, degradation, or fragmentation from oil and gas development, road construction, urban expansion, increased recreation or other land use impacts.

UNIT MANAGEMENT OBJECTIVES

Population

Population Objective 1: Maintain healthy elk populations at biologically and socially sustainable levels

Population Objective 2: Foster support among stakeholders for Utah's elk management program

Population Objective 3: Achieve a proper distribution of elk on private and public lands

Target Winter Herd Size – Manage toward a winter elk population objective of 2,500 elk (modeled population) distributed in the subunit populations listed below-

Anthro subunit 700 elk
Range Creek subunit 1,800 elk **Total 2,500 elk**

- Utilize General Season Any Bull hunting strategy.
- Utilize antlerless harvest to maintain elk populations at or below population objectives.
- Utilize strategies that assure adequate antlerless elk harvest on private lands.
- Promote public hunting access on private lands where applicable.

Habitat

The unit habitat objectives will follow the goals and objectives outlined in the statewide elk plan with the primary goal to "Conserve and improve elk habitat throughout the state." This will be done by maintaining sufficient habitat to support elk herds at population objectives, reducing competition for forage between elk and livestock, and reducing adverse impacts to elk herds and elk habitat.

- Improve forage and cover values on elk summer ranges. Practices will include prescribed fire, selective logging, and mechanical treatments that promote a diverse age structure in aspen communities.
- Remove pinyon-juniper encroachment into winter range sagebrush parks and summer range mountain brush communities.
- Improve wet meadow habitats through shrub treatments in high elevation habitats.
- Improve limited water resources on the unit by developing and maintaining existing springs and guzzlers and installing wildlife guzzlers where needed.
- Minimize conflicts between elk and wild horses through habitat improvement and encouraging wild horse gathers when horse numbers exceed population objectives.
- Improve existing canyon bottom riparian communities by treating greasewood and overmature sagebrush through chemical, mechanical, and other methods, and minimize impacts on croplands in these habitats.
- Protect crucial habitats from oil and gas development and assure best possible location of wells to minimize habitat losses using best information available.

CURRENT STATUS OF ELK MANAGEMENT

Population

<u>Anthro-</u> The Anthro subunit was last surveyed in February 2022. A total of 972 elk were counted suggesting a population estimate of 1,215 elk. The current population estimate is 1,200 elk.

Range Creek- The elk population on the Range Creek subunit has steadily increased over the past 7 years. The 2022 population estimate is 2200 elk which is over the objective of 1800 elk. This population was heavily affected by long term drought and was stagnant for nearly a decade despite very conservative antlerless harvest. In recent years, the population has rebounded and antlerless harvest is being adjusted to reduce this population. General Season Any Bull harvest has averaged about 100 bulls per year for decades. Similarly, bull harvest on the 6 CWMUs on this subunit have been stable at around 65 bulls per year (Table 2b) This unit was last flown in February 2021. Summer classification counts during this period have indicated low calf production averaging 37 calves per 100 cows.

Table 2a. Population and Harvest Trends, Nine Mile, Anthro Subunit 2017-22.

Year	Population Estimate	Bull Harvest	Antierless Harvest
2017	1,000	18	30
2018	1,200	8	57
2019	1,100	18	159
2020	1,100	15	139
2021	1,100	18	150
2022	1,200	20	113

Table 2b. Population and Harvest Trends, Nine Mile, Range Creek Subunit 2017-22.

Year	Population Estimate	CWMU Bull Harvest	General Season Any Bull Harvest	Antlerless Harvest	
2017	1,400	75	80	88	
2018	1,350	54	118	48	
2019	1,250	65	78	44	
2020	2,100	60	63	32	
2021	2,100	58	132	85	
2022	2,200	64	91	89	

Habitat

<u>Habitat Conditions</u> - Elk habitat on the unit is comprised of 35 percent yearlong range, 22 percent summer range, and 43 percent winter range. Summer range is limiting on this unit. Summer elk habitat is restricted to a fairly narrow band of high elevation aspen/Douglas fir communities and elk are found at relatively high densities. Summer ranges and high elevation winter ranges (Mountain big sagebrush communities) appear to be in stable condition according to permanent range trend studies conducted by DWR in 2020. There were a total of 12 permanent range trend study locations that were read in 2020 on the unit. Of these, 7 sites are within elk winter range. Browse and herbaceous trends appear to be stable over the past 20 years and mid-potential winter ranges where elk typically winter have DCI scores indicating "Fair to Good" winter range. Approximately 55 percent of range trend sites were in fair-excellent condition, and increase of five percent from 2015.

High elevation sites are generally in good condition, however the herbaceous understory is dominated by introduced perennial grass species which have the potential to be aggressive and lead to reduced prevalence of desirable grasses and forbs. Conifer encroachment into aspen is also a concern. The mountain big sagebrush sites are receiving heavy elk use and are also at low risk of cheatgrass expansion. Mountain browse and big sagebrush communities are experiencing early encroachment of pinyon juniper and also have cheatgrass present. Mountain sagebrush communities are experience high usage by horses.

At lower elevation sites, high amounts of annual grasses pose a greater threat by increasing fuel loads and altering fire regimes. Pinyon juniper encroachment is also occurring on lower elevation sites.

Cooperative BLM/UDWR spring range transects have shown stable to declining utilization by elk. Pellet group counts and browse utilization have decreased slightly in recent years. BLM range assessments in the area have not noted any deteriorating range conditions or overutilization by elk.

Habitat limitations include general degradation and loss, public land range availability, forage condition, and landowner acceptance of big game in the unit. Encroachment by pinyon-juniper woodland communities threaten rangelands. Crop depredation by elk on this unit is relatively minor on this unit and typically occurs during the spring months. Competition with domestic livestock is a potential conflict on portions of the unit. Competition with wild horses on the Range Creek subunit can be pronounced when horse numbers are above objectives and competing with elk for declining resources in the Cold Springs and Cedar Ridge areas. Bison populations emigrating from Ute Tribal Lands are also increasing which could significantly change elk habitat quality and quantity.

Several habitat improvement projects that will benefit elk have been completed or are planned by federal agencies, UDWR, and private landowners (see Appendix I). These projects should allow elk numbers to be maintained at the population objective without creating conflicts with other land uses.

BARRIERS TO ACHIEVING UNIT MANAGEMENT OBJECTIVES

Population

Much of the unit is not accessible to public hunters. Limited public access to both private and public lands makes it difficult to achieve adequate harvest of antlerless elk and quality opportunities for bull hunting.

Habitat

- Drought impacts to forage condition, vigor and abundance.
- Limited summer range on the unit.
- Habitat fragmentation, loss and disturbance as a result of oil and gas development.
- Pinion-Juniper invasion in limited sagebrush park areas.
- Conifer encroachment in overmature aspen communities
- Wild horse utilization on elk ranges.
- Low elevation canyon bottoms are dominated by greasewood and overmature basin big sagebrush with little forage/cover value for elk.
- Competition with domestic livestock if operators stock at full permitted numbers.

Other Barriers

- Crop depredation.
- Other mortality factors extreme weather conditions such as drought or extreme winter, disease, predation, poaching, road mortality.

STRATEGIES FOR REMOVING BARRIERS AND REACHING UNIT MANAGEMENT OBJECTIVES

Population Monitoring

Population Size - Utilize harvest data, tri-annual aerial trend counts, preseason classification and mortality estimates. A model has been developed to estimate winter population size based on the above data.

Harvest - The primary means of monitoring harvest will be through the statewide mandatory harvest reporting. Achieve the target population size by use of antlerless harvest using a variety of harvest methods and seasons. Aggressive and localized antlerless harvest will be used to control elk populations and respond to localized range concerns. Bull harvest strategies will be developed through the RAC and Wildlife Board process to achieve management objectives.

Management Actions to Remove Population Barriers

Big Game/Livestock Competition - Continue to work with land management agencies and public grazing operators, as well as private landowners to assure that proposed population objectives are reasonable and attainable. Antlerless harvest through Limited Entry, Private Lands Only (PLO), CWMU, and mitigation permits will be the primary strategy utilized to achieve and maintain population objectives and to address specific habitat concerns and depredation problems. Keep public informed of deer and elk population trends and incorporate elk management strategies that have minimal impacts to the deer population.

Elk Distribution - Coordinate with CWMU operators and private landowners to achieve adequate antlerless harvest on private lands to meet population objectives.

Habitat Monitoring

- Continue to monitor permanent range trend studies throughout the winter range.
- Annually inspect rangeland vegetative community impacts and health through cooperative DWR/BLM habitat assessment surveys that include ocular field assessments, utilization transects, and range rides.
- Continue to develop and implement Habitat Management Plans for UDWR owned properties on the unit.

Management Actions to Remove Habitat Barriers

- Cooperate with private landowners, federal and state agencies to allow wild fires to burn in beneficial and non-threatening areas and to rehabilitate fires in a way that will benefit wildlife.
- Cooperate with private landowners, federal and state agencies to increase vegetative understory and reduce pinion-juniper encroachment in important sagebrush and mountain shrub communities.
- Work with oil and gas interests to protect key areas and minimize, or mitigate for losses due to development.
- Pursue Conservation Easements on critical parcels of private property to protect elk habitat.
- Cooperate with private landowners, oil and gas development companies, federal and state agencies to prepare access management plans to enhance elk habitat value.
- Continue to foster good relationships with private landowners and promote habitat enhancement projects that will benefit wildlife on private lands as well as promote public access for hunting opportunities.

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. Revision of this plan may also take place as needed to address future issues or incorporate new management strategies. Unit elk plan goals, objectives, recommendations 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 plans.

APPENDIX I. Completed and Proposed Habitat Treatment Projects Benefitting Elk on the Nine Mile Unit, 2017-23.

Habitat Projects Completed Projects Fall 2016-Spring 2023					
Project Name	Acres	Treatment Type			
Nutter Ranch Thurber Fescue Treatments	86	Disc			
Cottonwood Ridge PJ Removal	2069	Lop and Scatter, Bullhog			
Big Wash Masticaton II	469	Bullhog			
Upper Anthro Lop & Scatter (Phase 4)	917	Lop and Scatter			
Bishop Ridge Pinyon and Juniper Removal	716	Lop and Scatter, Chain			
Tavaputs Plateau Sagegrouse Habitat Restoration	1056	Lop and Scatter, Seeding			
Upper Anthro Lop and Scatter (Cottonwood and Chokecherry)	1016	Lop and Scatter			
Cold Springs WMA Conifer Removal Aspen Regeneration Phase V	71	Pile Burning			
Range Creek Phase I Maintenance	276	Lop and Scatter, Bullhog, Lop, Pile, and Burn			
Anthro Lop and Scatter (Wildhorse Ridge)	764	Lop and Scatter			
Cold Springs WMA Conifer Removal Aspen Regeneration Phase VI	129	Cable Felling			
Range Creek Wild Horse Herd Management Area - Bait Trapping Gather 2018		Horse Gather (92 animals)			
Onaqui and Range Creek Horse and Burro Gathers 2019		Horse Gather (154 animals)			
Sowers Canyon Watershed Improvement	987	Lop and Scatter, Check Dams			
Cottonwood Ridge Maintenance	1967	Lop, Pile, And Burn, Seeding			
Range Creek Phase I Maintenance Herbicide	447	Herbicide Application			
Price Slashing	2589	Lop and Scatter, Bullhog, Guzzler Construction			
Sunnyside Project Phase I	349	Lop and Scatter, Bullhog			
Upper Price River Watershed	108	Pile Burn, Wet Meadow Enhancement			
Soldier Ridge Brush Management	166	Chain Harrow			

Habitat Projects Projects in Progress					
Project Name Acres Treatment Type					
Upper Price River Watershed FY24	2733	Lop and Chip, Stream Channel Improvements, Buck and Pole Fence			
Anthro/Avintaquin Lop and Scatter	635	Lop amd Scatter			
Carbon and Emery Habitat Restoration and Maintenance	8458	Lop and Scatter			