

**ELK HERD UNIT MANAGEMENT PLAN**  
**Elk Herd Unit 13**  
**La Sal**  
**August 2016**

**BOUNDARY DESCRIPTION**

**Grand and San Juan counties** - Boundary begins at the junction of I-70 and the Green River; south on the Green River to the Colorado River; north on the Colorado River to Kane Springs Creek; southeast along this creek to Hatch Wash; southeast along this wash to US-191; south on US-191 to the Big Indian Road; east on this road to the Lisbon Valley Road; east on this road to the Island Mesa Road; east on this road to the Utah-Colorado state line; north on this line to I-70; west on I-70 to the Green River.

This boundary includes two subunits including:

**Unit 13A - La Sal, La Sal Mountains - Grand and San Juan counties** - Boundary begins at I-70 and the Green River; south along the Green River to the Colorado River; north along this river to Kane Springs Creek; southeast along this creek to Hatch Wash; southeast along this wash to US-191; south on US-191 to Big Indian Road; east on this road to Lisbon Valley Road; east on this road to Island Mesa Road; east on this road to the Utah-Colorado state line; north on this state line to the Dolores River; northwest along this river to the Colorado River; northeast along this river to the Utah-Colorado state line; north on this state line to I-70; west on I-70 to the Green River.

**Unit 13B - La Sal, Dolores Triangle - Grand County** - Boundary begins at the Colorado River and the Utah-Colorado state line; south on this state line to the Dolores River; northwest along this river to the Colorado River; northeast along this river to the Utah-Colorado state line.

**LAND OWNERSHIP**

**Estimated Elk Habitat Acreage by Season and Ownership for WMU 13A, La Sal Mountains**

Ownership	Yearlong Range		Summer Range		Winter Range		Spring/Fall	
	Area (acres)	%	Area (acres)	%	Area (acres)	%	Area (acres)	%
Bureau of Land Management	19,764	87	116	<1	58,546	41	1,483	13
Private	765	3	34,287	30	14,993	10	1,880	16
Utah State Institutional Trust Lands	1,935	9	27,949	25	5,082	4	86	1
Utah Department of Natural Resources	180	1	0	0	0	0	0	0
Utah Department of Transportation	0	0	0	0	41	<1	0	0
United States Forest Service	0	0	51,030	45	65,049	45	8,265	71
<b>TOTAL</b>	<b>22,645</b>	<b>100</b>	<b>113,382</b>	<b>100</b>	<b>143,711</b>	<b>100</b>	<b>11,714</b>	<b>100</b>

**Range Area and Approximate Ownership\* WMU 13B, Dolores Triangle**

Ownership	Yearlong range		Summer Range		Winter Range	
	Area (acres)	%	Area (acres)	%	Area (acres)	%
Bureau of Land Management					61,435	88
Utah State Institutional Trust Lands					6,645	9
Private					1,915	3
Utah Department of Natural Resources						
<b>TOTAL</b>					69,995	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 the population at a level that is within the long-term capability of the available habitat. Consider impacts of the elk herd on other land uses and public interests including private property rights, agricultural crops and local economies.

Maintain and protect existing crucial elk ranges needed to support the population objectives. Seek cooperative projects to improve the quality and quantity of elk habitat and to minimize conflicts with livestock and other wildlife. Promote enhancement of habitat security and escapement areas for elk.

**UNIT MANAGEMENT OBJECTIVES**

**Population**

Target Winter Herd Size - Maintain a winter population of 2,500 elk distributed on the subunits as follows:

La Sal Mountains 1,800 elk  
 Dolores Triangle 700 elk

The population objective for the Dolores Triangle subunit was decreased in 2008 by 150 elk (approx. 20%) to be consistent with Dolores Triangle deer management plan revision due to poor winter range conditions. Range conditions have not improved and the population objective will be maintained at the reduced level.

Bull Harvest Age Objective - Maintain a 3-year average bull harvest age of 5.5–6.0 years old on limited entry hunts.

**Habitat**

Summer Range - Maintain and improve summer forage availability on the La Sal Mountains through aspen regeneration and oakbrush thinning projects. Coordination with private landowners on summer ranges will be discussed and implemented as conditions and funding allow.

Winter Range - Maintain and improve winter foraging areas through browse regeneration and pinyon-juniper removal projects. Approximately 1,360 acres on the La Sal Mountains will be targeted over the next 5 years if funding is available. Monitor range conditions and elk use in the Dolores Triangle to maintain habitat quality necessary to achieve population objectives. Address excessive habitat utilization through harvest strategies coordinated with Colorado Division of Parks and Wildlife (CDPW).

## **CURRENT STATUS OF ELK MANAGEMENT**

### **Population**

#### **La Sal Mountains**

The elk population on the La Sal Mountains is currently at the management objective. The last helicopter survey was conducted in January 2014. A total of 1,449 elk were counted and the population is currently estimated at 1,800 elk. Antlerless harvest has been maintained at levels sufficient to stabilize elk numbers at the management objective.

Aerial surveys can be beneficial for population estimate trends, but should not be relied on solely for age or sex classification data, given the inherent social behavior of elk during survey sessions, when bulls tend to be by themselves away from large cow groups and often in rugged, hard to survey locations. Observer error is also greater at this time when classifying calves, given their body size at this time. Data from both aerial surveys and summer classification indicate that calf production and bull:cow ratios are good and fairly stable on this unit.

Bull harvest on limited entry hunts has steadily been increasing with increased numbers of permits. Average age of bulls harvested has remained slightly above the harvest age management objective for the past three years. Spike bull harvest has been somewhat stable over the years, with a noticeable increase in 2015. Harvest results from the past 10 years are listed below.

<b>Year</b>	<b>LE Bull Permits</b>	<b>LE Bull Harvest</b>	<b>LE Bull Avg. Age</b>	<b>Spike Bull Harvest</b>	<b>Antlerless Harvest</b>
2006	75	55	5.9	53	108
2007	71	49	7.4	15	115
2008	84	61	6.9	60	198
2009	90	57	7.1	30	176
2010	97	70	6.3	64	159
2011	111	90	6.7	61	178
2012	125	81	6.0	50	157
2013	126	89	6.8	52	120
2014	136	102	6.5	67	188
2015	140	101	6.6	103	184

The number of bulls harvested on the Colorado portion (unit 60) of the La Sal Mountains has slowly increased over the past 5 years. Annual harvest in Colorado has averaged 66 bulls during the past 5 years. The Colorado portion is managed under a 4-point or better bull harvest strategy.

#### **Dolores Triangle**

This unit is winter range for elk that summer in the Glade Park and Pinon Mesa areas (unit 40) of western Colorado. CDPW biologists estimate the population of unit 40 at 3,000 elk. The number of elk that winter in the Dolores Triangle unit is dependent upon winter severity. Winter population numbers have typically varied between 300 and 700 elk, with 522 elk observed during the 2014 aerial survey. A small number of limited entry bull permits have been issued each year for this area. Antlerless harvest was initiated in 2007 and has remained somewhat stable over the past 5 years.

### **Habitat**

#### **La Sal Mountains**

Summer ranges and upper elevation winter ranges on the La Sals generally appear to be in good, stable condition according to permanent range trend studies conducted by UDWR in 2014. There are

13 permanent range trend study locations on the unit of which 12 are found within elk use areas. Lower elevation winter ranges are showing slightly downward trends in range condition. There is increased decadence in sagebrush communities and slight downward trends in herbaceous communities. Interagency spring range transects have shown relatively stable utilization by elk. Pellet-group transect data indicated lower range use by elk from 1998 to 2003. Range use has slightly increased over the last 10 years. USFS and BLM assessments of current vegetative trends on the unit have not indicated overutilization of herbaceous forage by elk.

Crop depredation by elk on this unit has been minor during the past 5 years and typically occurs during the spring months. The one exception, a chronic summer alfalfa depredation problem, was resolved by permanently fencing the property. Given the current conditions, associated land use factors, and concern for potential competition with a struggling deer population, no changes to the elk population objective are being proposed at this time

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

#### **HABITAT PROJECTS COMPLETED AND PROPOSED**

<b>Completed Projects – 2012 through 2016</b>		<b>Proposed Projects – 2017 to 2021</b>	
La Sal Mountain Aspen Enhancement, UDWR	120 acres	Brush Hole Shrub Treatment, UDWR	360 acres
Lackey Fan Fire, UDWR	250 acres	Lackey Basin Aspen Restoration Project, USFS	500 acres
Ray Mesa Research Seeding, BLM	150 acres	West Slope PJ/Oak Mastication Project, USFS	500 acres
Black Ridge Fuels Reduction and Vegetative Restoration - Phase II, BLM	2,250 acres		
Black Ridge Fuels Reduction and Vegetative Restoration - Phase III, BLM	640 acres		
Black Ridge Fuels Reduction and Vegetative Restoration, BLM	2,480 acres		
Lackey Basin Aspen Restoration Project, USFS	1,600 acres		
Willow Basin Aspen Restoration Project, USFS	950 acres		
Sally's Hollow/Sinbad Managed Wildfire Project, USFS	550 acres		

## Dolores Triangle

The Dolores Triangle is entirely winter range for the Colorado unit 40 elk herd. Elk use is highly variable dependent on snowfall amounts at upper elevation ranges. A series of woodland fires in this area have created substantial new forage areas for elk. Lower elevation winter ranges have been impacted by prolonged drought and concentrated ungulate use adjacent to agricultural fields. There is increased decadence in sagebrush communities and downward trends in soil and herbaceous communities. Cheatgrass invasion is evident in these sites. Elk use of these sites has increased, but is typically low during mild winters. Potential competition with deer herds during severe winters is a concern. Habitat improvement projects completed for other species have benefited wintering elk on this subunit.

## **BARRIERS TO ACHIEVING UNIT MANAGEMENT OBJECTIVES**

### **Population**

Big Game / Livestock Competition - Resistance of livestock operators to manage for more elk and public concerns of impacts from a large elk population on a struggling deer population.

Elk Distribution - Elk herd congregation on private land CWMUs during the hunting seasons where hunting pressure is significantly lighter than on public lands (La Sal Mountains). Elk use of low elevation winter ranges in poor condition during severe winters (Dolores Triangle).

Harvest Age Objective - Public resistance to increasing numbers of bull hunting permits to reduce average age of harvest.

### **Habitat**

Drought - Impact of prolonged drought to range condition and forage availability. Annual precipitation and weather patterns are the primary influence on range conditions and, ultimately, elk population numbers on this mountain range.

Limited Summer Range - Amount of quality summer habitat is limited for foraging and calving areas, and these ranges are shared with livestock and other big game.

Habitat Loss – Plant succession changes in important summer areas (conifer encroachment in aspen stands) and winter areas (pinyon-juniper invasion in mountain brush-sagebrush communities) reduces forage quality and quantity. Lack of browse regeneration and invasion of annual grasses on lower elevation winter ranges also impact habitat quality.

### **Other Barriers**

Land Resource Activities - Impacts from habitat fragmentation and disturbance as a result of fire, logging and energy development activities. Recent forest fires and logging operations have provided new forage areas but, because of their large acreages, have reduced escapement and security areas. Current and future oil and gas development could potentially fragment existing elk habitat and displace elk to less productive areas.

Elk Distribution on Winter Range - Congregation of large elk herds on some winter areas may result in excessive utilization and could impact range conditions of important deer winter ranges.

Crop Depredation - Chronic crop depredation problems could result in reducing elk numbers in specific areas.

Predation - The La Sal Mountains has a healthy black bear population. Black bears are known to take elk calves, but bear predation does not appear to have a significant impact on elk calf survival rates.

Disease - Chronic wasting disease has been documented in deer and elk on this mountain range.

Illegal Harvest - Extent of illegal harvest on this unit is unknown, but because both subunits cross state boundaries and trophy-quality bulls are present, the potential for illegal activities is elevated. Illegal harvest of mature bulls has the potential to affect the availability of limited entry permits.

## **STRATEGIES FOR REMOVING BARRIERS AND REACHING UNIT MANAGEMENT OBJECTIVES**

### **Population Monitoring**

Population Size - The population is monitored using harvest data, aerial trend counts and classification, preseason classification, and survival estimates. The wintering population on this unit varies because of the movement of elk from and into Colorado depending on winter snowfall amounts.

Bull Age Structure - Monitor age class structure of the bull population through the use of checking stations, uniform harvest surveys, field bag checks, preseason classification and aerial classification.

Harvest - The primary means of monitoring harvest will be through the statewide uniform harvest survey. The target population size will be achieved through antlerless harvest using a variety of harvest methods and seasons.

### **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) 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 to develop hunting strategies to reduce elk congregations on private land during public land hunting seasons. Continue coordination with Colorado Division of Wildlife to ensure bull harvest management on Colorado hunt unit 60 complements harvest strategies implemented on the La Sal Mountains. Development of elk harvest strategies for the Dolores Triangle must consider weather conditions that dictate elk movements into Utah.

Harvest Age Objective - Continue public relations to provide information on effect of changing permit numbers in relation to average age of harvested bulls.

### **Habitat Monitoring**

Habitat Condition and Trend – Continue analysis of trends in habitat condition through permanent range trend studies, pellet transects, and field inspections. Land management agencies will similarly conduct range monitoring to determine vegetative trends, utilization and possible forage conflicts. Range trend studies will continue to be conducted by DWR to evaluate elk habitat health, trend, and carrying capacity.

### **Management Actions to Remove Habitat Barriers**

Limited Summer Range - Work with public land management agencies to develop specific vegetative objectives to maintain the quality of important elk use areas. Respond to any range deterioration concerns and address documented excessive forage utilization.

Habitat Loss - Cooperate with federal land management agencies and private landowners in carrying out habitat rehabilitation projects such as reseedings, controlled burns, water developments, etc. on public and private lands to maintain or increase biological carrying capacity.

### **Management Actions to Remove Other Barriers**

Land Resource Activities - Continue to coordinate with land management agencies and energy development companies in planning and evaluating resource uses and developments that could impact habitat quality. Work to develop and administer access management plans for the purposes of habitat protection and escape or "security" areas.

Elk Distribution on Winter Range - Utilize antlerless harvest in specific areas when necessary to target elk concentrations impacting winter range conditions and/or important deer wintering areas.

Crop Depredation - Work with private landowners to make sure depredation is maintained within tolerable levels, and will not become a limiting factor. Utilize depredation hunts, fencing and other actions where appropriate to reduce/mitigate crop depredation.

Predation - Maintain bear hunting seasons to control bear populations. Maintain high quality summer habitats to protect important calving areas (see "Management Actions to Remove Habitat Barriers").

Disease - Continue testing of suspect animals to detect presence of CWD in the elk population.

Illegal Harvest – In areas where illegal bull harvest has been documented, law enforcement efforts will be focused through action plans.