

ELK HERD UNIT MANAGEMENT PLAN
Elk Herd Unit 1
Box Elder
May 2012

BOUNDARY DESCRIPTION

Box Elder, Tooele, Salt Lake, Davis and Weber counties- Boundary begins at the Utah-Idaho state line and I-15; west along this state line to the Utah-Nevada state line; south along this state line to I-80; east on I-80 to I-15; north on I-15 to the Utah-Idaho state line.

Subunit 1a Grouse Creek: Box Elder County- Boundary begins at the extreme northwest corner of Utah; east on the Utah-Idaho state line to the Lynn Valley/Oakley county road; south along this road following what becomes the Dove Creek road to SR-30; west on SR-30 to the Nevada state line; north along this state line to the extreme northwest corner of Utah.

Subunit 1b Raft River Mtn.: Box Elder County- Boundary begins at the Utah state line and SR-42; east along SR-42 to SR-30; west on SR-30 to the Dove Creek county road; north along the Dove Creek road to the Lynn Valley road; north along the Lynn valley/Oakley road to the Utah-Idaho state line.

Subunit 1c Pilot Mtn: Box Elder and Tooele counties- Boundary begins at SR-30 and the Utah-Nevada state line; east along SR-30 to the township line separating Range 17 West and Range 18 West; south along this township line to I-80; west along I-80 to the Utah-Nevada state line; north along this state line to SR-30. This subunit also includes the Nevada's s newly formed/named unit 091. (Prior to 2007, it was known as unit 079. The Nevada Pilot subunit used to include the Toanna range to the west. The Toanna's were removed from the Pilot subunit and retained the old Nevada subunit name of 079).

LAND OWNERSHIP

Ownership	Yearlong range		Summer Range		Winter Range	
	Area (acres)	%	Area (acres)	%	Area (acres)	%
Forest Service			30,115	54	5,913	13
Bureau of Land Management	190,324	48	5,459	10	21,528	48
Utah State Institutional Trust Lands	28,082	7	1,553	3	3,447	8
Native American Trust Lands						
Private	182,078	45	18,277	33	13,800	31
Department of Defense						
USFWS Refuge						
National Parks						
Utah State Parks						
Utah Division of Wildlife Resources						
TOTAL	400,484	100	55,404	100	44,688	100

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 population at a level that is within the long-term capability of the available habitat.

Manage the Grouse Creek/Raft subunits as approved by the West Box Elder elk committee and subsequently the Utah Wildlife Board. This required managing the elk population using CWMUs to address the complex private/public checkerboard land pattern, a stipulation stating that "landowners will not be expected to tolerate elk following into a pattern of causing sustained measurable damage to crops" and both the Raft subunit and Grouse Cr. population could increase by immigration only.

Co-manage the Pilot subunit with the State of Nevada to abide by the interstate hunt agreement.

Prioritize habitat restoration and enhancement efforts to stem the loss of grasslands to Juniper and cheatgrass encroachment or conversion.

UNIT MANAGEMENT OBJECTIVES

Maintain West Box Elder Elk Committee Requirements

- CWMU's-Maximize the use of elk CWMUs in subunit 1a and 1b to manage elk.
- Crop depredation- Immediate response to all crop damage complaints
- Elk population cannot exceed 275 animals (at any time) on combined subunits 1a and 1b.
- Proposed option: If elk immigrate into the Raft subunit 1b- the population cannot exceed 100 animals

Habitat

- Increase 1000 acres of winter range on subunit 1a.
- Increase summer and winter carrying capacity on subunit 1c.

Population

Target Winter Herd Size

- Subunits 1a and 1b combined cannot exceed 275 total
 - Subunit 1b Raft: Allow population to increase up to 100 animals
- Subunit 1c Pilot Mtn.: Increase population to achieve 400 animals (computer modeled population).

Bull Age Harvest Composition-

- Subunit 1a and 1b: Average age of harvested bulls will be maintained at 4.5-5.0 years.
- Subunit 1c: Average age of harvested bulls will be maintained at 5.5-6.0 years.

CURRENT STATUS OF ELK MANAGEMENT

Habitat

- Habitat conditions: All areas of this desert unit appear to be declining. Cheatgrass invasion is occurring at a rapid rate.

- Determining population objectives: When looking at population objectives, the Division has taken into account numerous barriers which include: 1) depredation issues 2) winter range that is beyond Division control 3) social and political factors 4) current and future range improvements and 5) current range health.
 - Subunit 1a: The West Box Elder Elk Committee approved 175-275

animals after reviewing the above information. The summer and winter populations are constantly straddling the border with Nevada. Movement of 100 plus animals every week is common.

-Subunit 1b: The West Box Elder Elk Committee approved 100 animals after reviewing the above information.

-Subunit 1c: It appears that the current 400 wintering elk objective may be too high for the current winter habitat. In 2000 this unit experienced a winter migration of 200-250 elk out of a population that was at the 400 objective. These elk appeared to move into the north Montello (Nevada) population and never returned. This was the beginning of the drought. The 1980's objective of 400 animals was based on an AUM allotment that required the elk to utilize feed that was on steep hillsides and thus not used by livestock. No livestock AUMs were lost during the process of "finding" approved feed for a new elk herd. Winter feed may be limiting and it is recommended that close scrutiny occur in winter as this unit approaches objective in 5+ years.

HABITAT PROJECTS COMPLETED AND PROPOSED

Completed Projects – 2002 through 2010		Proposed Projects – 2011 and beyond	
Meacham Cr.	1600 acres	Ensign PJ chaining	640 acres
Cook Cyn/Kimbal Cr	640 acres		
Dairy Valley wildfire-Utah	9200 acres		
Bettridge wildfire	3000 acres		
Pole Cr	1000 acres		
Project total acreage	15,440 acres		640 acres

Population Dynamics

-Subunit 1a:

-Population status: This area currently winters approximately 100 animals. This is essentially the same number as 10 years ago, however; the summer peak average population has more than doubled (100 to 200). It appears that quite a few of Utah's summering elk, winter in Nevada. Their Utah winter distribution is as follows: 10-20 elk on the southern Grouse Creek range, 10 -20 on the Goose Creek drainage (Nevada/Idaho border area) and 80 in the Kilgore Basin/Nevada line area. The Nevada population is being maintained at objective. Routine discussions of management and populations take place with the Nevada Division of Wildlife. The Nevada portion of this area supports 1250 elk. The Grouse Creek Subunit appears to occupy the easternmost edge of their range.

- Harvest: The 4 CWMUs have averaged 17 permits annually. There are 2 Limited Entry public land tags as well as a general season spike only hunt. For the CWMU and Limited Entry hunts, the past 5 year average yearly harvest has been 15 bulls at 4.86 years of age. Age structure is based on various sample sizes (4-15).

-Subunit 1b:

-Population status: In the late 1990's small groups of elk routinely moved through this area but none stayed. There were approximately 60 elk in 2010 that moved back into Idaho in October. In 2011, similar population results as 2010 were observed.

-Harvest: In 2011, one CWMU harvested 2 bulls with the average age of 3.5.

-Subunit 1c:

-Population status: There are approximately 250 elk. This population is slowly increasing. Bull/ cow ratios have averaged 40+ and cow/calf ratio's averaged 39 with an increasing trend.

-Harvest: The past 5 year average annual harvest has been 3 bulls with an age of 5.2 and increasing (3 yr average is 5.3)

-Unit 1 East Box Elder:

This is an "unauthorized" population and currently numbers about 50 animals. Beginning in the late 1980's Idaho had a growing elk population that started wintering by Snowville, after going around an Idaho wildlife drift fence. The fence was removed in the mid 1990's and 200-300 elk started crossing I-84 to winter on the southern end of the Hansel Mountain range. Several elk stayed during the summer. When the summer population reached 20+ DWR initiated several hunts to attempt to eliminate this population. An open bull season was started along with free and fee antlerless tags to landowners and a public antlerless hunt. The public antlerless hunt was discontinued after 6 years due to lack of access. The summer resident population has tripled over the last 15 years. The annual winter influx makes this rogue population even harder to manage. Numerous elk damage discussions have taken place with concerned smaller acreage landowners and all landowners are still content to maintain the population with free/fee mitigation tags. This has slowed the growth down considerably. The elk spend most of the summer and fall on one landowner with nightly jaunts off the property for water, alfalfa, or corn. An open bull hunt continues to harvest an increasing number of bulls. This equals about 30 bulls annually (3 year average is 36). The Idaho population appears to be increasing with around 500 elk coming into Utah in winter 2011.

BARRIERS TO ACHIEVING UNIT MANAGEMENT OBJECTIVES

West Box Elder Elk Committee Requirements

- CWMU's. The Grouse Creek Subunit elk population would be eliminated if CWMUs were not used to manage the population. Currently 4 CWMU's help manage 80% of the elk and the associated crop depredation issue's.
- Crop depredation. Landowners will not be expected to tolerate elk following into a pattern of causing sustained measurable damage to crops.
- Population increases allowed by immigration only.

Habitat

- Subunit 1a: The majority of the current late August/September population winters mostly in Nevada. There are around 80 elk that winter on the Kilgore Basin Nevada/Utah border. This area also winters several hundred deer. The small eastern Grouse Creek Range population appears to have very limited summer habitat. Currently there is only one small group of 10-20 elk that rarely depredate and live on rangeland. This area is an un-grazed BLM allotment. Summer crop depredation occurs by almost the entire population.
- Subunit 1b: Either there is little/no available feed or public use is intense enough to keep most elk off of this mountain.
- Subunit 1c: Winter feed appears to be limiting. Summer habitat changes such as increased cheatgrass and low mountain grass production may have forced elk into crop depredation circumstances. Very little crop damage occurred in the 1980's and 1990's but during and following this last drought all cropland has depredation beginning in early June. The fall 2011 helicopter survey found 68 of 95 elk classified in agricultural fields.

Population (Public resistance to increasing numbers of bull hunting permits to reduce mean age of harvest) This does not appear to be a factor.

Other Barriers

Crop Depredation is a huge problem in the Grouse Creek Subunit and is an increasing problem in the Pilot Mountain Subunit.

STRATEGIES FOR REMOVING BARRIERS AND REACHING UNIT MANAGEMENT OBJECTIVES

West Box Elder Elk Committee Requirements

-CWMU'S Subunit 1a: Maintain and enhance the existing CWMU's and pursue ways to address the remaining elk that are depredated on cropland.

Actions to Remove Elk Committee Barriers

-Recommend no additional losses for elk management in the CWMU program. This includes the 4 current CWMU's, their acreage requirements, percent splits and the use of additional public/private checkerboard properties to manage this elk population as mandated.

-Crop depredation: Continue to encourage and support the damage control technicians to promptly respond and address elk damage complaints.

Habitat

Monitoring-Continue to monitor permanent range trend studies located throughout the winter range.

Actions to Remove Habitat Barriers

-Encourage and support the habitat section in enhancement of summer and winter range conditions on subunits 1a and 1c:

-1a: Continue working with the landowner on the proposed Bovine PJ removal/reseeding project. Elk winter range will be enhanced and haystack depredation may decline.

-1c: Work with the BLM on all wildfire reseeding on the wilderness study area. This should help increase winter carrying capacity and limit summer crop damage.

Population

Monitoring

-Population Size - The majority of elk on Subunit 1a winter in Nevada and is surveyed by Nevada during their annual winter flight. The population is monitored using harvest data, aerial trend counts and classification, preseason classification, and survival estimates. Constant discussion with Nevada regarding their population computer model and management has been occurring. The Utah proportion of this overall elk population is around 10-15%. Subunit 1c is also co- managed with Nevada and is shared 50:50.

-Bull Age Structure - Monitor age class structure of the bull population through the use of uniform harvest surveys, limited entry tooth aging, and aerial classification.

-Harvest - The primary means of monitoring harvest will be through the statewide uniform harvest survey. Achieve the target population size through antlerless harvest using a variety of harvest methods and seasons. Bull harvest strategies will be developed through coordination with Nevada.

Actions to Remove Population Barriers

Continue annual proactive meetings and mailings for landowners affected by depredating elk. The last ten years of proactive fee/free mitigation permit mailings and meetings have removed most depredating population barriers.

The Division will attempt to increase the population objective on this unit when the biological and social carry capacity allow for an upward adjustment.

ELK HERD UNIT MANAGEMENT PLAN
Elk Herd Unit # 2
Cache
May 2012

BOUNDARY DESCRIPTION

Cache, Rich, Weber, and Box Elder counties — Boundary begins at the Utah-Idaho state line and I-15; south on I-15 to US-91; northeast on US-91 to SR-101; east on SR-101 to Hardware Ranch and USFS Road 054 (Ant Flat); south on USFS 054 to SR-39; east on SR-39 to SR-16; southeast on SR-16 to the Utah-Wyoming state line; north along this state line to the Utah-Idaho state line; west along this state line to I-15.

Limited Entry Unit Boundaries

North Cache: Cache and Rich counties — Boundary begins at US-89 and the Utah-Idaho state line; southwest on US-89 and US-89/91 to Brigham City; west on US-91 to I-15; north on I-15 to the Utah-Idaho state line; east along this state line to US-89.

South Cache: Cache and Rich counties — Boundary begins at US-89 and the Utah-Idaho state line; southwest on US-89 to Logan and US-89/91; southwest on US-89/91 to SR-101; east on SR-101 to Hardware Ranch and USFS Road 054; south on USFS Road 054 (Ant Flat Road) to SR-39; east on SR-39 to SR-16 (Woodruff); southeast on SR-16 to the Utah-Wyoming state line; north along this state line to the Utah-Idaho State line; west along this state line to US-89; excludes Cache, Meadowville Unit.

Cache, Meadowville: Rich County — Boundary begins at US-89 and the USFS boundary west of Garden City; south along this boundary to SR-39; east on SR-39 to SR-16; north on SR-16 to SR-30; northwest on SR-30 to US-89; west on US-89 to the USFS boundary.

LAND OWNERSHIP

Ownership	Yearlong range		Summer Range		Winter Range	
	Area (acres)	%	Area (acres)	%	Area (acres)	%
Forest Service	5701	25	202,884	65	116,462	32
Bureau of Land Management	0	0	16,627	5	97,367	27
Utah State Institutional Trust Lands	0	0	13,432	4	18,929	5
Native American Trust Lands	0	0	0	0	0	0
Private	16,043	72	78,415	25	118,553	32
Department of Defense	0	0	0	0	0	0
USFWS Refuge	0	0	0	0	0	0
National Parks	0	0	0	0	0	0
Utah State Parks	0	0	0	0	0	0
Utah Division of Wildlife Resources	629	3	1,187	<1	14,972	4
TOTAL	22,374	100	312,544	100	366,283	100

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 population at a level that is within the long-term capability of the available habitat.

Summer range is abundant and in good to excellent condition. Winter range is in acceptable condition for wintering elk with the possible exceptions of two feed sites at Hardware Ranch Wildlife Management Area (HRWMA) and Millville Face Wildlife Management Area (MFWMA). Elk at HRWMA are fed to hold them away from Cache Valley where they would probably become a depredation problem. Habitat at HRWMA is in good condition and improving, but without the feeding program these elk would not stay most years. Millville Face Wildlife Management Area (MFWMA) is a feed site established to provide wintering elk with food during lean months because they are held behind a high fence, and would become a problem if they made it into Cache Valley. MFWMA is a traditional winter range for elk. Habitat condition there is poor due to frequent fires and overuse by wintering elk.

UNIT MANAGEMENT OBJECTIVES

Habitat

Maintain and/or enhance forage production through direct range improvements throughout the unit on winter range to achieve population management objectives. Pay special attention to WMA's and areas where holding elk could alleviate pressure on private landowners experiencing damage by wintering elk.

Work with private and federal agencies to maintain and protect critical and existing winter range from future losses.

Population

Target winter herd size of 2300 elk (computer modeled population).

Bull Age Harvest Composition – Average age of bulls harvested from the North Cache will be 4.5–5.0 years old, on the South Cache will be 4.5–5.0 years old, and on Meadowville 4.5–5.0 years old.

CURRENT STATUS OF ELK MANAGEMENT

Habitat

Elk on this unit generally summer on public land and winter on a mixture of public and private land at lower elevations in Cache Valley and Rich County. Most of the range is in suitable condition to expect growth in elk numbers into the future. Most losses of winter range to development are taking place in areas where elk do not traditionally winter. Though habitat is probably not limiting at this time, tolerance for wintering elk by landowners is limiting. The objective set forth in this plan takes all factors into consideration and sets the population objective of the unit at 2300 wintering elk.

HABITAT PROJECTS COMPLETED AND PROPOSED

Completed Projects – 2006 through 2012		Proposed Projects – 2012 and beyond	
Hardware Ranch Grazing Project	14,000	Hardware Ranch Grazing Project	14,000
Richmond WMA	1,000	Richmond WMA	1,000
		Middle Fork WMA	1,000
Project total acreage	15,000		16,000

Population (Current Status)

The population is stable at the objective of 2300 wintering animals (Modeled Population, Pop II Model).

In order to maintain the population at objective, approximately 250 antlerless animals will need to be harvested annually through the duration of this plan. These animals will be taken using limited entry antlerless permits and depredation permits. This harvest will be concentrated in areas where animals are causing damage to agricultural interests.

BARRIERS TO ACHIEVING UNIT MANAGEMENT OBJECTIVES

Habitat At this point habitat does not seem to be limiting on this unit.

Population Public meetings have garnered public support for the current objective.

Other Barriers Damage to private landowners will continue to be a problem on this unit. So far fencing, damage payments, and mitigation permits have had varying degrees of success. The strategy should be to prevent damage where possible, compensate for damage when necessary, and use hunting to discourage animals from coming into situations where they can cause damage. Culling is an option of last resort, and will probably not be necessary at the management objective of 2300 animals.

STRATEGIES FOR REMOVING BARRIERS AND REACHING UNIT MANAGEMENT OBJECTIVES

Habitat

Monitoring

Continue to monitor permanent range trend studies located throughout the winter range.

Actions to Remove Habitat Barriers

Efforts are currently underway to alleviate pressure to landowners, and reduce needs for feeding in Cache Valley by addressing habitat concerns at the Richmond WMA (RWMA) and Middle Fork WMA (MFWMA). At RWMA the goal is to enhance winter range and hold elk in that area on public property as much as possible. At MFWMA over utilization has left little natural forage for elk, increasing the number of days feed needs to be provided.

Continue to pursue conservation easements in Cache Valley.

Population

Monitoring

Population Size – The population is monitored using harvest data, aerial trend counts and classification, preseason classification, and survival estimates.

Bull Age Structure - Monitor age class structure of the bull population through the use of Limited Entry hunter tooth submission for aging, checking stations, uniform harvest surveys, field bag checks, and aerial classification.

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

Management Actions to Remove Population Barriers

Fencing, depredation hunts, other actions to reduce/mitigate crop depredation.

ELK HERD UNIT MANAGEMENT PLAN
Elk Herd Unit # 3
Ogden
May 2012

BOUNDARY DESCRIPTION Weber, Box Elder, Cache, and Morgan counties -

Boundary begins at Hyrum and SR-101; east on SR-101 to the Ant Flat Road (at Hardware Ranch); south on this road to SR-39; west on SR-39 to SR-167 (Trappers Loop Road); south on SR-167 to I-84; west on I-84 to I-15; north on I-15 to Exit 364 and US-91; northeast on US-91 to SR-101; east on SR-101 to Hyrum.

LAND OWNERSHIP

Ownership	Yearlong range		Summer Range		Winter Range	
	Area (acres)	%	Area (acres)	%	Area (acres)	%
Forest Service	0	0	15,727	15	18,237	11
Bureau of Land Management	0	0	0	0	0	0
Utah State Institutional Trust Lands	0	0	8,217	8	0	0
Native American Trust Lands	0	0	0	0	0	0
Private	8	0	79,181	76	138,217	81
Water	0	0	156	<1	28	<1
USFWS Refuge	0	0	0	0	0	0
National Parks	0	0	0	0	0	0
Utah State Parks	0	0	0	0	0	0
Utah Division of Wildlife Resources	0	0	1,263	1	15,110	9
TOTAL	8	100	104,543	100	171,591	100

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 population at a level that is within the long-term capability of the available habitat.

Summer range is abundant and in good condition. Winter ranges are disappearing due to increased development in Ogden Valley. Elk depredation of agricultural crops continues to be a problem during winter months.

UNIT MANAGEMENT OBJECTIVES

Habitat

Maintain and/or enhance forage production through direct range improvements throughout the unit on winter range to achieve population management objectives.

Work with private and federal agencies to maintain and protect critical and existing winter range from future losses.

Population

Target winter herd size of 800 elk (computer modeled population).

CURRENT STATUS OF ELK MANAGEMENT

Habitat

Elk wintering on this unit are found in southern Cache and Ogden valleys. Most winter and summer range is privately owned. Winter range is limiting in Ogden Valley where development from the Wasatch front is quickly encroaching into areas where elk currently winter. In Cache Valley winter range is less likely to be developed in the short term, but depredation to crops, haystacks, and equipment is a major concern. Those factors combined set the social carrying capacity of the unit at 800 wintering animals.

HABITAT PROJECTS COMPLETED AND PROPOSED

Completed Projects – 2002 through 2011	Proposed Projects – 2012 and beyond
	Middle Fork WMA
	1,000
Project total acreage	0
	1,000

Population (current status)

Because of continued harvest of animals that are depredating agricultural interests, the population is currently below objective at around 600 wintering animals.

Three year plan to achieve population objective: In order to bring this population to objective it will be necessary to limit antlerless harvest to groups of animals that are actually depredating agricultural interests. Limited entry antlerless permits will be eliminated and permits for antlerless animals will only be issued to landowners experiencing damage. Non-lethal methods of depredation control like fencing and hazing will be especially important to achieve the objective.

BARRIERS TO ACHIEVING UNIT MANAGEMENT OBJECTIVES

Habitat: As winter range continues to be lost to development, population objectives will have to be adjusted accordingly.

Population: Because to the amount of depredation on the Ogden Unit, it may be difficult to reach objective.

Other Barriers: Depredation to crops, haystacks, equipment and infrastructure.

STRATEGIES FOR REMOVING BARRIERS AND REACHING UNIT MANAGEMENT OBJECTIVES

Habitat

Monitoring

Continue to monitor permanent range trend studies located throughout the winter range.

Actions to Remove Habitat Barriers

Continue to rehabilitate the Middle Fork Wildlife Management Area (MFWMA) for the primary purpose of wintering elk and deer. This rehabbing may help hold elk on the MFWMA and prevent or reduce crop depredation in the valley.

Continue to pursue conservation easements around MFWMA and work with land managers to improve habitat for wintering elk and mule deer where necessary.

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 influx of animals from the Morgan-South Rich and Cache units. Movement data obtained from telemetry and ear tagging studies indicate that a significant number of elk from those units wintered on the MFWMA.

Bull Age Structure - The Ogden unit is managed under a general season hunt format and as such bull age objectives are not required. General herd health will be assessed through the use of checking stations, uniform harvest surveys, field bag checks, 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 and season formats.

Management Actions to Remove Population Barriers

Use fencing, depredation hunts, and other actions to reduce/mitigate crop depredation.

ELK HERD UNIT MANAGEMENT PLAN
Elk Herd Unit # 4
Morgan-South Rich
May 2012

BOUNDARY DESCRIPTION

Morgan, Rich and Summit counties - Boundary begins at the junction of I-80 and I-84 near Echo; east on I-80 to the Utah-Wyoming state line; north along this state line to SR-16; north on SR-16 to SR-39 near Woodruff; west along SR-39 to SR-167 (Trappers Loop road); south on SR-167 to SR-30 at Mountain Green; west on SR-30 to I-84; east on I-84 to I-80.

LAND OWNERSHIP

Ownership	Yearlong range		Summer Range		Winter Range	
	Area (acres)	%	Area (acres)	%	Area (acres)	%
Forest Service	0	0	21700	7.3	15943	6.4
Bureau of Land Management	0	0	5023	1.7	22523	9
Utah State Institutional Trust Lands	0	0	632	.2	3123	1.2
Native American Trust Lands	0	0	0	0	0	0
Private	0	0	265436	89	192549	78
Department of Defense	0	0	0	0	0	0
USFWS Refuge	0	0	0	0	0	0
Water	0	0	324	0	198	<1
Utah State Parks	0	0	0	0	0	0
Utah Division of Wildlife Resources	0	0	5194	1.7	12196	5
TOTAL	0	0	298309	100	246532	100

UNIT MANAGEMENT GOALS

Manage the elk population at levels consistent with available habitat but below carrying capacity. Much of the unit is privately owned and enrolled in the Cooperative Wildlife Management Unit program with limited bull harvest. Actively work and cooperate with private landowners in the rehabilitation and/or acquisition of critical winter range and other range improvement projects as opportunity permits. Try to secure conservation easements on private properties to slow the rapid development occurring on critical ranges within the unit. Encourage and educate private landowners and Cooperative Wildlife Management Unit operators to continue the harvest of antlerless elk in sufficient numbers to bring the winter elk population down to the herd unit management objective. Maintain the population at a level that is within the long-term capability of the available habitat.

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.

Continue to work on habitat projects on UDWR owned properties within the unit and set management objective numbers of elk for Wildlife Management Areas.

UNIT MANAGEMENT OBJECTIVES

Habitat

Maintain and improve current acreages of summer and winter range (298,309 acres summer range, 246,532 acres winter range) through conservation easements and habitat projects. Much of the winter range is privately owned and could be at risk of being sold and developed. Strive to improve 500 acres/year of winter habitat on public and/or private property for deer and elk winter range. Work with private landowners on proper grazing techniques to enhance wildlife habitat.

HABITAT PROJECTS COMPLETED AND PROPOSED

Completed Projects – 2002 through 2011		Proposed Projects – 2012 and beyond	
Deseret/ Disk & Reseed	3000 acres	Henefer-Echo WMA/ Aerial Seed-Graze	2000 acres
		200 acres of winter browse reseed in Harris Canyon, fencing and water projects to control grazing for habitat improvement.	200 acres
Project total acreage	3000 acres		2200 acres

Population

Target winter herd size for a winter population of 3500 elk (computer modeled population).

CURRENT STATUS OF ELK MANAGEMENT

Habitat (Current Status)

Habitat conditions for the Morgan-South Rich Unit are stable but may deteriorate with continued high elk populations. Some of the private landowners are making habitat improvements for livestock and wildlife, benefiting elk on summer and winter range.

Elk and deer use of winter ranges is a major factor driving the population objectives for this unit. The elk population objective of the range with current conditions is at 3500 elk. A large percentage of the elk in the unit winter on the Deseret Land and Livestock (DLL) Ranch in Rich County. The DLL Ranch is doing extensive range treatments to increase the winter capacity of the elk herds that in the past have been supplemented with hay in winter months. The yearly need for supplementation of hay and the duration of feeding of elk has been greatly reduced as a result of these successful projects.

Housing encroachment and development in the Morgan County portion of the unit is a factor that is reducing the available habitat for elk in that portion of the unit. With average to above average snow depths, human conflicts with depredation, livestock competition, and ornamental damage occur. There are planned housing developments on current elk winter ranges in the Morgan area.

Currently, private property owners within the unit place a high value on elk and many derive a portion of their income from wildlife inhabiting private rangelands. Many landowners are members of a private habitat improvement organization called Quality Resource Management that helps landowners design and acquire funding for habitat improvement projects. Members meet annually to plan projects and discuss wildlife herd management objectives and harvest strategies. Habitat projects for the Henefer-Echo WMA, are being planned to be implemented on a yearly basis. A conservation easement is being donated to the Nature Conservancy on a 28,000 acre ranch in the Weber County portion of the unit.

Population (Current Status)

The Morgan-South Rich elk unit was last counted in February 2009. The population was estimated at 4400 elk. The 2011-2012 modeled population shows the elk herd at 4900 animals.

Year	Harvest	
	Bull Harvest	Antlerless Harvest
2000	305	323
2001	269	294
2002	263	316
2003	282	153
2004	297	438
2005	302	426
2006	306	664
2007	340	649
2008	276	366
2009	369	563
2010	292	662
2011	299	451

BARRIERS TO ACHIEVING UNIT MANAGEMENT OBJECTIVES

Habitat

The population objective of 3500 elk is based on current range conditions and supplemental feeding of elk by a private ranch in the Rich County portion of the unit. If supplemental feeding were to permanently stop in this portion of the elk herd, the population objective would have to be lowered to reflect the capacity of the natural winter range and prevent habitat damage. The feeding program was started to maintain numbers of elk and to keep elk from haystacks and feeding with livestock in the surrounding areas. Where much of the land in the unit is privately owned, habitat development and enhancement is out of the control of the UDWR.

Population

The main barrier to reaching the population objective is the inability to achieve an adequate harvest of antlerless elk on private lands within the unit. Bull:cow ratios

remain high for the unit due to the high percentage of private lands and Cooperative Wildlife Management Units. There is very limited bull harvest on the private properties. There is no harvest age objective for this unit as it is not a limited entry unit.

Other Barriers

No other major barriers exist on this unit.

STRATEGIES FOR REMOVING BARRIERS AND REACHING UNIT MANAGEMENT OBJECTIVES

Habitat

Monitoring

Continue to monitor permanent range trend studies located throughout the winter range. Continue to monitor range conditions on the Henefer-Echo WMA and the impacts of current high elk numbers on crucial deer winter range.

Actions to Remove Habitat Barriers

Develop a plan to rehabilitate 500 acres of Henefer-Echo WMA property; targeting old fires that are dominated with annual grasses. Continue to work on acquiring conservation easements to protect remaining habitat and maintain the carrying capacity of the unit. Continue to work with private landowners and the Quality Resource Management group on habitat projects and range improvement methods.

Population

Monitoring

Population Size - The population is monitored using harvest data, aerial trend counts and classification, pre-season classification, and survival estimates. The wintering population on this unit varies because of movement of animals from neighboring units.

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

The foremost need for the Morgan-South Rich elk herd is to reduce the population to the target herd management objective. Because this unit is dominated by private lands, CWMU's will need to become active participants to help UDWR achieve the target population objective. Continue to educate landowners on the importance of antlerless harvest. Hold annual meetings to inform landowners of harvest results and discuss antlerless hunt strategies. Continue to adapt hunt seasons, areas, and numbers to changing elk movements and numbers. Continue to look for new strategies to incorporate public hunters on private lands for antlerless harvest (e.g. Walk-in access program).

ELK HERD UNIT MANAGEMENT PLAN
Elk Herd Unit # 5
East Canyon
May 2012

BOUNDARY DESCRIPTION

Morgan, Summit, Salt Lake and Davis counties - Boundary begins at the junction of I-80 and I-84 (Echo Junction); southwest on I-80 to I-15; north on I-15 to its junction with I-84 near Ogden; east on I-84 to Echo Junction and I-80.

LAND OWNERSHIP

Ownership	Yearlong range		Summer Range		Winter Range	
	Area (acres)	%	Area (acres)	%	Area (acres)	%
Forest Service	0	0	30715	26	0	8
Bureau of Land Management	85	1	0	0	32	<1
Utah State Institutional Trust Lands	0	0	0	0	0	0
Native American Trust Lands	0	0	0	0	0	0
Private	11388	90	87887	74	24646	99
Department of Defense	0	0	0	0	0	0
USFWS Refuge	0	0	0	0	0	0
National Parks	0	0	0	0	0	0
Utah State Parks	0	0	0	0	0	0
Utah Division of Wildlife Resources	1122	9	77	<1	72	<1
TOTAL	12595	100	118679	100	24750	100

UNIT MANAGEMENT GOALS

To manage the elk population at levels consistent with available habitat, and to cooperate with landowners in the protection, improvement and/or acquisition of critical winter range as opportunity permits. Work to obtain conservation easements on private lands for protection of critical winter and summer areas.

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 population at a level that is within the long-term capability of the available habitat. Maintain elk population at current population objective to avoid competition with mule deer populations. Encourage and educate private landowners and Cooperative Wildlife Management Unit operators to continue harvest of antlerless elk in sufficient numbers to maintain the winter elk population at the herd unit management objective.

UNIT MANAGEMENT OBJECTIVES

Habitat

Maintain the 106,072 acres of summer, winter, and year-long range. There is increasing development in most areas of the range for housing and recreational properties, and conservation easements should actively be sought out to preserve the dwindling habitat. Work with private landowners on improving and properly grazing winter ranges, as nearly all of the winter range exists on private lands. The East Canyon Unit is adjacent to the Wasatch Front and has become a main area for summer homes and year-round recreation. The Salt Lake and Summit county portions of the unit needs to continually be monitored due to encroaching housing on crucial range and human-wildlife conflicts. Provide big game escape cover/security by implementing access management where warranted.

Population

Target winter herd size of a winter population of 1000 elk (computer modeled population).

Davis and Salt Lake counties part - 5A - This part of the unit contains most of the public lands within the unit. The winter ranges are adjacent to the heavily populated Wasatch Front and are becoming very limited due to the impact of urban development. Therefore, the post season winter population objective for this portion of the unit is approximately 250 elk.

Morgan & Summit counties part - 5B - A majority of the land within this portion of the unit is privately owned and depredation can be a significant factor in determining the tolerable winter population objective. However, based on the past several years, 750 wintering elk is the current objective on this portion of the East Canyon Unit. Private landowners and local interest groups must be involved in management recommendations. Without their support and cooperation, management objectives may not be realized and elk population control may not be possible

CURRENT STATUS OF ELK MANAGEMENT

Habitat (Current Status)

The habitat seems to be improving slightly for elk with the increasing herbaceous trend. The objective of the unit is 1000 elk with 250 elk in the Salt Lake-Davis portion of the unit, and 750 elk in the Summit-Morgan part. Limited winter ranges and competition with livestock for summer and fall feed seem to be the limiting factors for elk. Also dwindling summer and winter habitat from development and recreational use are factors reducing carrying capacity of elk range.

Approximately 1500 acres of the Red Rock WMA were burned and re-seeded in the mid 1990's. It was a very successful project improving winter range in that area. There are negotiations underway for conservation easements in the Summit County portion of the unit for several large tracts of land, south of the town of Henefer and near the Morgan-Summit County line.

Population (Current Status)

The last aerial trend count was in February 2011 when 2204 elk were counted on the unit. 607 elk were counted in the Salt Lake-Davis portion of the East Canyon Unit with a bull cow ratio was 37 bulls per 100 cows. The 2012 modeled population is approximately 3050 elk. Effective removal of antlerless animals will be critical to achieve the population objective.

Harvest		
Year	Bull Harvest	Cow Harvest
1999	89	76
2000	121	100
2001	86	143
2002	127	127
2003	128	185
2004	151	152
2005	93	155
2006	175	201
2007	217	372
2008	188	291
2009	194	188
2010	245	236
2011	171	297

BARRIERS TO ACHIEVING UNIT MANAGEMENT OBJECTIVES

Habitat

Winter range is probably the main factor limiting the carrying capacity for this herd unit. Nearly all of the winter range is in private ownership and mostly out of the control of the UDWR for improvements. Continued housing and summer recreational development eat away at traditional elk ranges in some of the fastest growing rural counties in the state.

HABITAT PROJECTS COMPLETED AND PROPOSED

Completed Projects – 2002 through 2011		Proposed Projects – 2011 and beyond	
None	acres	None	acres
Project total acreage	acres		acres

Population

The majority of the elk range in the unit is privately owned and is a barrier to achieve the necessary antlerless harvest to control elk numbers. Some landowners are reluctant to allow hunting and provide areas for elk populations to increase despite efforts to decrease numbers. Due to the amount of private lands in this unit, it will be necessary to explore other antlerless elk harvest strategies to maximize antlerless harvest on this unit.

Other Barriers

If the population is maintained at the current objective (1000 animals) crop depredation should be a minor factor to consider in specific areas.

STRATEGIES FOR REMOVING BARRIERS AND REACHING UNIT MANAGEMENT OBJECTIVES

Habitat

Monitoring

Continue to monitor permanent range trend studies located throughout the winter range.

Actions to Remove Habitat Barriers

Continue to work with private landowners to enhance ranges with grazing programs and habitat projects. Work on conservation easements for habitat protection to maintain carrying capacity of the unit.

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 may vary due to elk movements from neighboring units.

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

Increase efforts to educate landowners to the need for antlerless elk harvest. Explore incentives like DWR assisted range improvement projects and/or Walk-in Access program to increase harvest of antlerless elk. Explore different permit allocation methods to maximize antlerless harvest on private lands where there are low harvest rates.

Actions to Remove Other Barriers

List specifics with expected outcome –Work on specific areas to reduce elk depredation by issuing mitigation permits to keep elk out of agricultural areas. Work to haze elk from these areas during periods when mitigation permits are not valid.

ELK HERD UNIT MANAGEMENT PLAN
Elk Herd Unit # 6
CHALK CREEK
May 2012

BOUNDARY DESCRIPTION

Summit and Duchesne counties - Boundary begins at the junction of I-84 and I-80 near Echo; northeast on I-80 to the Utah-Wyoming state line; southeast along this state line to SR-150; south on SR-150 to Pass Lake and the Weber River Trail head; west on this trail to Holiday Park and the Weber River road; west on this road to SR-32; northwest on SR-32 to I-80 and Wanship; north on I-80 to I-84 near Echo

LAND OWNERSHIP

Ownership	Yearlong range		Summer Range		Winter Range	
	Area (acres)	%	Area (acres)	%	Area (acres)	%
Forest Service	0	0	33,987	9	0	0
Bureau of Land Management	0	0	80	<1	224	<1
Utah State Institutional Trust Lands	0	0	245	<1	222	<1
Native American Trust Lands	0	0	0	0	0	0
Private	0	0	300,278	90	45,471	95
Department of Defense	0	0	0	0	0	0
USFWS Refuge	0	0	0	0	0	0
National Parks	0	0	0	0	0	0
Utah State Parks	0	0	0	0	124	<1
Utah Division of Wildlife Resources	0	0	89	<1	1,966	4
TOTAL	0	0	334,679	100	48,007	100

UNIT MANAGEMENT GOALS

Manage for a population of healthy animals capable of providing a broad range of recreational opportunities which include 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 population at a level that is within the long-term capability of the available habitat.

This unit is comprised of mostly private property, and as a result, winter range is being lost at an alarming rate due to development. In the next 5 years steps need to be taken to improve forage production on existing winter range to manage this elk population at the plan objective. Habitat improvement and rehabilitation projects on private lands

throughout the unit should be initiated to increase forage for wildlife and livestock interests. Conservation easements should be initiated to protect winter habitat from further loss to urban development.

UNIT MANAGEMENT OBJECTIVES

Habitat

Maintain and improve forage production on all winter range within this unit for the planning period.

Continue working with private landowners and Utah Foundation for Quality Resource Management (QRM) to protect winter range from future losses.

Population

Target winter herd size of a winter population of 2400 elk (computer modeled population).

CURRENT STATUS OF ELK MANAGEMENT

Habitat

Overall range trend is stable to slightly improving with the increased precipitation in this area. When looking at elk population objectives, the Division has taken into account barriers which include, 1) depredation issues 2) winter range that is beyond division control 3) social and political factors 4) current range improvements 5) future range improvements and 6) overall range health. As these factors change the Division will adjust the population objective as needed.

In general, summer elk habitat is extensive within this unit; however, the elk population objective is determined by winter range and impacts of elk on private land agriculture and ranching.

Several factors reduce the capability of this unit to support larger elk populations including agricultural depredation, competition for forage with domestic livestock, over utilization of winter browse in areas of heavy concentration of deer and elk during hard winters, and landowner tolerance. Starting in 2012 juniper thinning and reseeded projects will be used to increase forage production on winter range.

PROPOSED HABITAT PROJECTS 2012 and Beyond

Crandall Canyon PJ Thinning	150-200 acres	2012
South Fork PJ Treatment	150-200 acres	2013

All winter range in this unit is on private land. Division land managers and biologists will be working with landowners to improve or rehabilitate as many acres as possible over the life of this plan.

Population (current status)

The population is approximately 4500 wintering animals (modeled population Pop II Model). This unit experiences significant movement of elk during the winter months from neighboring units.

To reach the population objective, removal of significant numbers of antlerless animals will need to occur annually through the duration of this plan. These animals will be taken using limited entry antlerless permits and depredation permits. This harvest will be concentrated in areas where animals are causing damage to agricultural interests. The majority of the elk range is privately owned and is a barrier to achieve the necessary harvest to control elk numbers. Some landowners are reluctant to allow hunting, which provides areas for elk populations to increase despite efforts to decrease numbers. Due to the amount of private lands in this unit, it will be necessary to explore other antlerless elk harvest strategies to maximize antlerless harvest on this unit.

TOTAL ELK COUNTED BY YEAR

Year	1990	1992	1996	1999	2001	2004	2007	2011
South of Chalk Creek Road	463	937	743	821	787	640	560	559
North of Chalk Creek Road	1097	1114	1552	1408	1064	966	1354	2613
Total	1560	2056	2295	2229	1851	1606	1914	3172

CLASSIFICATION

Year	Mature Bulls	Yearling Bulls	Cows	Calves	UNC Antlerless	Calves/100cows	Bulls/100Antlerless
2004	216	111	418	257	---	61	48
2007	228	175	125	61	---	49	28
2011	336	235	---	---	2601	59*	22

* 2011 Pre-season elk classification data

BARRIERS TO ACHIEVING UNIT MANAGEMENT OBJECTIVES

Habitat

Loss of winter range due to development.
 Poor range conditions during drought years.
 Reduced quality of winter range due to juniper dominance.

Population

Antlerless elk harvest is often times difficult due to the amount of private land on the unit. Limited access becomes a problem for many sportsmen when large groups of elk seek refuge on private property. CWMU's will need to become active participants to help the UDWR achieve target population objective.

Other Barriers

There is low landowner tolerance of elk due to depredation and rangeland use throughout this unit and, as result, damage to private land will continue to be a problem. Fencing, damage payments, and mitigation permits have had varying

degrees of success in alleviating depredation issues. The Division will be working on strategies to prevent damage where possible, compensate for damage when necessary, and discourage animals with hunting pressure from coming into situations where they can cause damage.

STRATEGIES FOR REMOVING BARRIERS AND REACHING UNIT MANAGEMENT OBJECTIVES

Habitat

Monitoring

Continue to monitor permanent range trend studies located throughout the winter range.

Actions to Remove Habitat Barriers

Initiate habitat improvement and rehabilitation projects on private lands in order to increase forage on the winter range. Continue to support conservation easements to protect winter habitat from loss to urban development.

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 movement of animals from neighboring units. Movement data obtained from telemetry and ear tagging studies indicate that elk from the North Slope unit winter on this unit, as well.

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. CWMU's will need to become active participants to help the UDWR achieve target population objective.

Management Actions to Remove Population Barriers

Continue focused antlerless elk hunts to place pressure on that portion of the elk herd that causes crop and rangeland depredation on private land. Continue Landowner Depredation (mitigation) hunts.

ELK HERD UNIT MANAGEMENT PLAN
Elk Herd Unit # 7
KAMAS
May 2012

BOUNDARY DESCRIPTION

Summit and Wasatch counties - Boundary begins at the junction of I-80 and SR-32 (Wanship); south on SR-32 to the Weber Canyon Road at Oakley; east on this road to Holiday Park and the Weber River Trail; east on the Weber River Trail to SR-150 near Pass Lake; south on SR-150 to the Soapstone Basin Road (USFS 037); south on this road to SR-35; west on SR-35 to Francis and SR-32; north on SR-32 to Kamas and SR-248; west on SR248 to US-40; north on US-40 to I-80; north on I-80 to SR-32 and Wanship.

LAND OWNERSHIP

Ownership	Yearlong range		Summer Range		Winter Range	
	Area (acres)	%	Area (acres)	%	Area (acres)	%
Forest Service	0	0	116,937	93	9,945	33
Bureau of Land Management	0	0	0	0	42	<1
Utah State Institutional Trust Lands	0	0	81	<1	199	0
Native American Trust Lands	0	0	0	0	0	0
Private	0	0	7,531	6	18,563	62
Department of Defense	0	0	0	0	0	0
USFWS Refuge	0	0	0	0	0	0
National Parks	0	0	0	0	0	0
Utah State Parks	0	0	0	0	0	0
Utah Division of Wildlife Resources	0	0	0	0	1,183	4
TOTAL	0	0	124,549	100	29,932	100

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 population at a level that is within the long-term capability of the available habitat.

This unit is comprised of mostly private property, and winter range within the unit is being lost to development with increasing frequency. Steps need to be taken to improve existing winter range to manage this elk population at the population objective. Habitat improvement and rehabilitation projects on private lands throughout the unit should be initiated to increase forage production for wildlife and livestock interests. Opportunities for additional conservation easements should be investigated as a means to protect winter range from loss to urban development.

UNIT MANAGEMENT OBJECTIVES

Habitat

Maintain and improve forage production on all winter range within this unit for the planning period.

Continue working with private landowners and the United States Forest Service to protect winter range from future losses.

Population

Target Winter Herd Size – maintain elk numbers at a winter population of 850 elk (computer modeled population).

CURRENT STATUS OF ELK MANAGEMENT

Habitat

Overall range trend is stable to slightly improving due to the increased precipitation in this area during the growing season.

When looking at elk population objectives, the Division has taken into account barriers which include, 1) depredation issues 2) winter range that is beyond division control 3) social and political factors 4) current range improvements 5) future range improvements and 6) overall range health. As these factors change the Division will adjust the population objective as needed.

In general, summer elk habitat is extensive within this unit; however, elk winter habitat is limited and impacts of elk on private land agriculture and ranching.

Several factors reduce the ability of this unit to support larger elk populations including agricultural depredation, competition for forage with domestic livestock, over utilization of winter browse in areas of heavy concentration of deer and elk during hard winters, and landowner tolerance. Most of the winter range in this unit is on private land. Division biologists and land managers will be working with landowners to improve as many acres as possible over the life of this plan.

Population (current status)

The population is stable at approximately 1100 wintering animals (modeled Population Pop II Model). This unit experiences significant movement of animals during the winter months from neighboring units.

To reach the population objective, removal of significant numbers of antlerless animals will need to occur annually through the duration of this plan. These animals will be taken using limited entry antlerless permits and depredation permits. Harvest will be concentrated in areas where animals are causing damage to agricultural interests. The majority of the elk winter range is privately owned and is a barrier to achieve the necessary harvest to control elk numbers. Some landowners are reluctant to allow hunting, which provides areas for elk populations to increase despite efforts to decrease numbers. Due to the amount of private lands in this unit, it will be necessary to explore other antlerless elk harvest strategies to maximize antlerless harvest on this unit.

TOTAL ELK COUNTED

	YEAR				2011
	1997	2001	2004	2007	
East Kamas				276	664
West Hills Kamas				210	206
Total	597	268	399	486	870

2011 ELK CLASSIFICATION

Mature Bulls	Yearling Bulls	Antlerless
34	52	784

BARRIERS TO ACHIEVING UNIT MANAGEMENT OBJECTIVES

Habitat

Winter range is being lost due to development.
Poor range conditions during drought years.

Population

Antlerless elk harvest is often times difficult due to the amount of winter range that is privately owned. Limited access becomes a problem for many sportsmen when large groups of elk seek refuge on private property.

Other Barriers

There is low landowner tolerance of elk due to depredation and rangeland use throughout this unit. Damage to private landowners will continue to be a problem on this unit. Fencing, damage payments, and mitigation permits have been used to reduce conflicts with private property owners. These strategies have had varying degrees of success. The strategy should be to prevent damage where possible, compensate for damage when necessary, and discourage animals with hunting pressure from coming into situations where damage may become an issue.

STRATEGIES FOR REMOVING BARRIERS AND REACHING UNIT MANAGEMENT OBJECTIVES

Habitat

Monitoring

Continue to monitor permanent range trend studies located throughout the winter range.

Actions to Remove Habitat Barriers

Continue to support conservation easements to protect winter habitat from loss to urban development

Continue to rehabilitate the Kamas WMA for the primary purpose of wintering wildlife. Habitat improvement and rehabilitation projects may help hold elk on the WMA and prevent or reduce crop depredation in the valley.

Investigate opportunities for habitat improvement projects on private property to increase forage production for wildlife and livestock interests.

Population

Monitoring

Population Size - The population is monitored using harvest data, aerial trend counts and classification, preseason classification, and survival estimates.

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

Continue focused antlerless elk hunts to place pressure on that portion of the elk herd that causes crop and rangeland depredation on private land.

Continue Landowner Depredation (mitigation) hunts.

ELK HERD UNIT MANAGEMENT PLAN
Elk Herd Unit # 8
(North Slope)
May 2012

BOUNDARY DESCRIPTION

Summit and Daggett counties - Boundary begins at the junction of SR-150 and the Summit-Duchesne county line (summit of the Uinta Mountains); north along SR-150 to the Utah-Wyoming state line; east along this state line to the Utah-Wyoming-Colorado state line (Three Corners); south along the Utah-Colorado state line to the Green River; west along the Green River to Flaming Gorge Reservoir; west along the south shoreline of this reservoir to Cart Creek; south along Cart Creek to US-191; south along US-191 to the Uintah-Daggett County line (summit of the Uinta Mountains); west along the summit of the Uinta mountains to SR-150.

LAND OWNERSHIP

Ownership	Yearlong range		Summer Range		Winter Range	
	Area (acres)	%	Area (acres)	%	Area (acres)	%
Forest Service	8926	78	456,996	86	93,008	49
Bureau of Land Management	1534	13	21,326	4	31,564	16
Utah State Institutional Trust Lands	610	6	5938	1	22,383	12
Native American Trust Lands	0	0	0	0	0	0
Private	304	2	40,105	8	41,254	22
Department of Defense	0	0	0	0	0	0
USFWS Refuge	0	0	0	0	0	0
National Parks	0	0	0	0	0	0
Utah State Parks	0	0	0	0	0	0
Utah Division of Wildlife Resources	47	1	2134	1	482	1
TOTAL	11,421	100	526,500	100	188,691	100

UNIT MANAGEMENT GOALS

Manage for a population of healthy animals capable of providing a broad range of recreational opportunities including hunting and viewing. Balance elk herd impacts on human needs, such as private property rights, agricultural crops and local economies. Maintain the population at a level that is within the long term capability of the available habitat. This unit will be managed within three subunits (Summit, West Daggett and Three Corners).

Continue habitat projects to improve forage for all wildlife populations. Numerous habitat projects have occurred within this unit over the past decades. Past and proposed projects include prescribed fires in pinyon-juniper areas, followed by aerial reseeding with forbs, grasses and browse species; mechanical treatment of pinyon-juniper and conifer encroachment in critical browse / grassland areas; and working with land agencies and livestock grazers to improve overall forage conditions for both wildlife and livestock.

UNIT MANAGEMENT OBJECTIVES

Habitat

Enhance forage production on a minimum of 10,000 acres of elk habitat, through direct range improvements to maintain population management objectives.

Continue working with private landowners and federal, state, and local agencies to maintain and protect crucial and existing winter range from future losses.

Continue providing improved habitat security and escapement opportunities for elk by working with federal agencies on motorized vehicle travel plans.

Population

Target Winter Herd Size— Manage elk numbers to achieve a target population size of 2100 wintering elk (computer modeled number).

Radio telemetry data confirm, under certain conditions, some animals move back and forth across the subunit boundaries and state lines. Therefore, the entire unit will be surveyed at one time (snow conditions permitting), and the distribution of elk during the trend count will be taken into account when determining if the subpopulations are actually above or below objective.

Subunit population objectives are listed below:

Summit (8a) – 300 elk

West Daggett (8b) – 1300 elk

Three Corners (8c) – 500 elk

Bull Harvest Objective for Limited Entry Subunit - For the Three Corners subunit, maintain a minimum average bull age of a 5.5-6 year-old bull in the harvest.

CURRENT STATUS OF ELK MANAGEMENT

Habitat

Current Status

(Unit 8a, North Slope Summit subunit)

DWR Range Trend sites are found on steep slopes that have high erosion potential. However, the understory, especially the bunch grasses, is dense and vigorous and provides adequate soil stabilization. Browse trends on the unit for the key browse species (birch leaf mountain mahogany) are stable. The sites in this area all show a stable to slightly increasing trend. Browse communities at lower elevations, especially sagebrush, suffered die-offs from the sustained drought in the early 2000s. However, where these browse die-offs have occurred, perennial native grasses have increased.

(Unit 8bc, North Slope Daggett and Three Corners subunits)

Overall range trend within these subunits has been greatly impacted by a sustained drought, which has impacted forage production and plant survival. Browse communities at lower elevations, especially sagebrush, suffered die-offs from the sustained drought. However, where these browse die-offs have occurred, perennial native grasses have increased.

The greatest positive impact to this unit occurred in 2002 from the Mustang / Dutch John wildfire. The fire area was reseeded and has significantly increased the amount of perennial forbs and grasses, although annual grasses have also increased.

The DWR Range Trend crew read 9 range trend study sites during 2010. Three sites had improving browse trend, one was stable, and five had declining trends though some were minimal. The key browse species are principally Wyoming big sagebrush, mountain big sagebrush and mountain browse species such as true mountain mahogany. Areas where sagebrush is the key species have shown continuing increases in decadence and loss of plants. The perennial forb understories associated with mountain big sagebrush and Wyoming big sagebrush have similar downward trends, but upward trends for perennial grasses.

When looking at elk population objectives, the Division has taken into account barriers which include, 1) depredation issues 2) winter range that is beyond division control 3) social and political factors 4) current range improvements 5) future range improvements and 6) overall range health. As these factors change the Division will adjust the population objective as needed.

In general, summer elk habitat is extensive within this unit; however, elk winter habitat is limited and impacts of elk on private land agriculture and ranching. On the West Daggett and Summit subunits, the elk population is limited by winter range. During winters with deep snow, elk move to lower elevations. Elk conflict with agricultural and ranching practices on private land. Significant depredation occurs in these areas. The Three Corners subunit consists of a higher percentage of year-round habitat and also experiences substantial depredation on private land year round.

The wildfire that occurred in 2002 in the Dutch John and Goslin Mountain area burned approximately 20,000 acres. Much of the area burned was mature pinyon-juniper with very little understory of grasses and forbs. This burn area was successfully reseeded and is producing significantly more forage than before the fire. Elk have been drawn into this area and use it year round.

Factors Limiting Elk Populations

Several factors limit elk populations on this unit including agricultural depredation, competition for forage with domestic livestock, over utilization of winter browse in areas of heavy concentration of deer and elk during hard winters.

Some of the winter range in this unit is located in Wyoming where that state also has elk depredation and concerns with elk numbers. Control of the elk once they enter Wyoming is out of DWR's hands.

Elk within this unit are sometimes in conflict with both agriculture and ranching. This is especially relevant on winter range and yearlong elk range. Concerns

over elk use on summer range conflicting with livestock grazing on USFS and BLM lands also exist.

Completed Habitat Improvement Projects

Over the past decades many habitat improvement projects have occurred that benefit elk and livestock. These projects include prescribed and wild fire, pinyon-juniper chainings, timber sales, conifer thinning, etc.

Projects completed over the past 10 years on the West Daggett and Three Corners subunits include:

Completed Project	Subunit	Land Agency	Acres	Cooperators	Year
Bare Top Conifer Lop & Scatter	8c	USFS	1100	DWR, USFS	2003
Goslin Mtn PJ Lop & Scatter	8c	BLM	1700	DWR,BLM	2006
Clay Basin PJ Lop & Scatter	8c	BLM	1000	DWR,BLM	2006
Mustang Wildfire Reseed	8c	BLM, USFS, SITLA, DWR	20,000	BLM, USFS, SITLA, DWR	2002-04
Red Ck Flat PJ Lop & Scatter	8c	BLM	900	DWR,BLM	2006
King's Point PJ Lop & Scatter	8c	BLM	3,000	DWR,BLM	2006
Red Creek Flat State Lop and Scatter	8c	SITLA	480	DWR, SITLA	2006
Clay Basin State-Lop and Scatter	8c	SITLA	410	DWR, SITLA	2006
Teepee Mtn Bullhog	8c	BLM	535	DWR, BLM	2007
Goslin Mtn Phase II L&S	8c	BLM	1185	DWR, BLM	2008
Red Creek Flat Bullhog	8c	BLM	200	DWR, BLM	2008
Red Creek Flat Bullhog Phase ii	8c	BLM	150	DWR, BLM	2008
Goslin Mtn bullhog	8c	BLM	300	DWR, BLM	2009
Goslin/Martin Draw bullhog	8c	BLM	245	BLM	2010
Goslin mtn bullhog phase III	8c	BLM	413	BLM	2011
Home Mtn L&S	8c	BLM	1000	BLM	2011
Dowd Mtn. PJ Lop & Scatter	8b	USFS	1700	DWR,BLM	2004-05
Red Canyon Understory Burn	8b	USFS	100	USFS	2005
Fire Fighters PJ Lop & Scatter	8b	USFS	50	USFS	2004
Hickerson Park Wildfire	8b	USFS	1700	USFS	2005
Cedar Springs fuel reduction	8b	USFS	184	DWR, USFS	2009
Road Decommissioning and reseed on the Mountain View and Evanston Ranger Districts	8a	USFS	3200	USFS	2003-06
TOTAL			39,552		

Proposed Habitat Projects

Following is a partial list of proposed habitat enhancement project. Others may be added as opportunities arise.

Proposed Project	Subunit	Land Agency	Acres	Cooperators	Approx. Year
Home Mtn Prescribed burn	8c	BLM	3000	DWR, BLM	2017
O-Wi-Yu-Kuts prescribed burn	8c	BLM	1600	DWR, BLM	2017
Misc Burns & Mechanical / Conifer PJ	all		2000		
Dutch John Gap L&S	8c	USFS	80	DWR, USFS	2012
Antelope Flat/Boars tusk PJ removal	8c	USFS	1500	DWR, USFS	2014
Lower Red Creek bullhog	8c	BLM	500	DWR, BLM	2013
Flaming Gorge PJ burn/L&S	8c/8b	USFS	2000	DWR, USFS	2015
TOTAL			10,680		

Population – Current Status

Summit (8a) subunit:

Year	Trend Count	Pop Est	Bull Ratio	Calf Ratio	Bull Hunters	Bull Harvest	Cow Permits	Cow Harvest	LO Cow Permits	LO Cow Harvest
07-08		280			2505	278	59	46	20	2
08-09		300			2654	220	29	36	6	0
09-10		300			2489	266	28	28	11	4
10-11	268	335	16	34	2912	363	58	54	35	17
11-12		335			2478	264	45	50*	20	

West Daggett (8b) subunit:

Year	Trend Count	Pop Est	Bulls / 100 Cows	Calves / 100 Cows	Bull Hunters	Bull Harvest	Cow Permits	Cow Harvest	LO Cow Permits	LO Cow Harvest
07-08		1000			1313	189	121	50	23	8
08-09		1100			1276	177	117	34	14	4
09-10		1200			1349	121	165	91	62	33
10-11		1200			1487	197	149	79	44	20
11-12		1100			1492	219	125	71	42	16

Three Corners (8c) subunit:

Year	Trend Count	Pop Est	Bulls / 100 Cows	Calves / 100 Cows	Bull Permit	Bull Harvest	Bull Ave Age	Cow Permits	Cow Harvest	LO Cow Permits	LO Cow Harvest
07-08		830			56	46	5	323	206	24	4
08-09		800			53	43	5.1	344	159	30	17
09-10		650			51	35	5.7	332	160	29	8
10-11		550			48	33	5.5	154	55	30	5
11-12		550			46	30	5.7	95	22	30	6

BARRIERS TO ACHIEVING UNIT MANAGEMENT OBJECTIVES

Habitat Barriers

- Loss of winter range due to sagebrush die off and resulting cheatgrass expansion.
- Poor range conditions during drought years.
- Reduced quality summer/transitional range due to conifer dominance.
- Conifer and PJ invasion of grasslands and browse areas critical for wildlife
- USFS lack of manpower and funding to conduct NEPA clearances.

Population Barriers

- Conflicts with antlerless hunt season structure and other hunts.
- Difficulty harvesting antlerless elk to maintain populations due to herds staying in difficult areas to hunt.
- Resistance by federal land agencies and landowners to increasing the population objective.

Other Barriers

- Crop Depredation throughout the unit.
- Elk use on private rangelands throughout the unit and in Wyoming.

STRATEGIES FOR REMOVING BARRIERS AND REACHING UNIT MANAGEMENT OBJECTIVES

Habitat Strategies

Monitoring

Continue to monitor permanent range trend studies located throughout the herd unit.

Conduct cooperative seasonal range rides and surveys to evaluate forage condition and utilization.

Actions to Remove Habitat Barriers

Work cooperatively with the USFS and BLM to utilize prescribed burning, mechanical conifer and PJ removal, and grazing to enhance elk forage quantity and quality.

Utilize antlerless elk harvest to improve or protect forage conditions if and when vegetative declines are attributed to elk overutilization.

Cooperate with and provide input to land management planning efforts dealing with management affecting habitat security, quality and quantity.

Population Strategies

Monitoring

- Population Size - The population is monitored using harvest data, aerial trend counts and classification, preseason classification, and survival estimates.

- 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. Average age of harvest on the Three Corners limited entry subunit will be determined by tooth age data from bull harvest.

- Harvest – The primary means of monitoring harvest will be through the statewide uniform harvest survey and the mandatory harvest reporting for the Limited Entry hunts on the Three Corners subunit. The target population size will be achieved through antlerless harvest using a variety of harvest methods and seasons.

Management Actions to Remove Population Barriers

- Continue focused antlerless elk hunts east of Red Creek and in Manila area to place pressure on that portion of the elk herd that cause crop and rangeland depredation on private land.

- Continue working with federal agencies and private landowners to monitor elk numbers and elk use. Implement collaring study to determine movement of elk across state lines.

- Continue Landowner Depredation hunts.