# ELK UNIT MANAGEMENT PLAN Elk Herd Unit #21 (Fillmore, Pahvant/Oak Creek) 2016

#### **BOUNDARY DESCRIPTION**

# Fillmore (East of I-15; Limited Entry)

Millard and Sevier counties--Boundary begins at I-70 and I-15; north on I-15 to US-50 at Scipio; southeast on US-50 to I-70; southwest on I-70 to I-15. Excludes all CWMUs.

# Fillmore Oak Creek South (West of I-15; General Season)

Millard and Juab counties: Boundary begins at I-15 and the Black Rock road; west on the Black Rock road to SR-257; north on SR-257 to US-50 and 6; east on US-50 and 6 to US-6; north on US-6 to I-15; south on I-15 to the Black Rock road.

#### LAND OWNERSHIP

(Total Unit Area: 1,488,301 acres; Elk Habitat: 474,411)

	Summer Range		Winter Range	
Ownership	Area (acres)	%	Area (acres)	%
Forest Service	211,000	93%	112,645	46%
Bureau of Land Management	1,431	1%	57,067	23%
Utah State Institutional Trust Lands	0	0%	3,444	1%
Native American Trust Lands	0	0%	1,641	1%
Private	14,704	6%	57,989	23%
Department of Defense	0	0%	0	0%
USFWS Refuge	0	0%	0	0%
National Parks	0	0%	0	0%
Utah State Parks	0	0%	0	0%
Utah Division of Wildlife Resources	394	0%	14,095	6%
Total	227,529	100%	246,881	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, private development rights, and local economies. Maintain the population at a level that is within the long-term capability of the available habitat to support.

# **POPULATION MANAGEMENT OBJECTIVES**

<u>Target Winter Herd Size</u>: Achieve a target population objective of 1,600 elk (modeled estimate) on the entire unit, with a maximum of 150 elk on the Fillmore Oak Creek South general season unit, which will continue as an any-bull unit.

<u>Bull Age Structure</u>: Maintain a 3-year average bull harvest age of 7.5-8.0 years for all hunt types on the Fillmore Unit. Age structure will not be monitored on the Fillmore Oak Creek South (west of I-15) unit.

<u>Recruitment</u>: Determine annual recruitment and population status of the herd.

<u>Harves</u>t: Maintain antlerless, general season spike-only, general season any-bull and limited entry any-bull.

# **POPULATION MANAGEMENT STRATEGIES**

<u>Monitoring</u>: Utilize harvest data, aerial trend counts, and preseason classification data to estimate wintering elk population on the unit.

<u>Bull Age Structure</u>: Monitor age class structure of the bull population through the use of check stations, harvest surveys, field bag checks, preseason classification, tooth age data, and aerial classification. Age class will not be monitored on the general season portion of the unit.

<u>Recruitment</u>: Aerial and/or ground classification will be conducted annually to determine population status, calf recruitment, calf/cow ratios, and range distribution.

<u>Harvest</u>: The primary means of monitoring harvest will be through the statewide harvest survey, check stations, and field bag checks. The target population size will be achieved through antlerless harvest using a variety of harvest methods and seasons.

#### **CURRENT POPULATION STATUS**

The elk population on this unit is estimated to be under the current objective of 1,600 elk. An aerial survey was conducted on this unit in February 2016. During this flight 1,172 elk were counted, giving a population estimate of 1,450 animals.

The average age of harvested bulls in 2015 was 7.8, which is up from the three-year average of 7.5 years. The cow:calf ratio in 2015 was 53 calves per 100 cows. Permit numbers for bulls have decreased slightly over the last few years in order to bring the average age of bulls harvested in line with the objective of 7.5-8.0.

### **HABITAT MANAGEMENT OBJECTIVES**

<u>Range Improvements</u>: Maintain and/or enhance forage production through direct range improvements throughout the unit on winter and summer range to achieve population management objectives.

<u>Winter Range</u>: Work with private and federal agencies to maintain and protect critical and existing winter range from future losses.

<u>Corridors</u>: Provide improved habitat security and escapement opportunities for elk. Provide as much opportunity as possible for elk to navigate roadways safely.

#### **HABITAT MANAGEMENT STRATEGIES**

Range Improvements: Maintain and/or enhance forage production on elk summer and winter range throughout the Fillmore Unit. Coordinate with the Fillmore Ranger District and BLM to complete projects designed to improve forage production for both elk and cattle and to improve elk distribution across the unit. Support federal land management agencies in managing vehicle access in order to provide and maintain refuge areas for elk.

<u>Winter Range</u>: Continue to monitor the permanent range trend studies located throughout the winter range. Conduct annual spring range rides to assess winter habitat with the land management agencies and the public.

<u>Corridors</u>: Cooperate with land management agencies and private landowners to identify crucial areas of elk habitat and work together to maintain and enhance elk habitat corridors. Work with UDOT to maintain and enhance signing, wildlife ramps, over/underpasses, and other wildlife crossing structures.

# **HABITAT IMPROVEMENT PROJECTS**

Between 2006-2015 there were 32,902 acres of elk habitat treated through habitat improvement projects. Currently there are 7,008 acres being treated. During July, 2016 there was also a 5,600 acre fire that burned in and around the Ebbs and Wild Goose canyon areas. The 2012 Fillmore Elk Plan Committee designated two areas of focus for habitat improvement projects on the unit. The northern area (Wild Goose) includes Pioneer, Wild Goose, and Ebbs canyons; the south area (South Mountain) includes South Mountain, Dry Wash, and Dog Valley. Both areas include important summer and winter range that can be improved to benefit elk. Several habitat projects have been completed in these areas since 2012.

# Completed projects since 2006:

Dry Creek Chaining - 1,399 acres

Dick Swain Discretionary Seeding - 79 acres

Jim Brunson Discretionary Seeding - 41 acres

Dog Valley/Interchange Private Lands Fire Rehabilitation - 7,194 acres

Milford Flat Fire Rehabilitation and Contracting - 1,623 acres

Fillmore WMA Juniper Thinning - 1,427 acres

Grabalt Big Game Forage Enhancement - 1,052 acres

Dry Creek Phase II - Plateau Treatment - 262 acres

Widemouth Canyon Chaining Phase I - 691 acres

Youngsfield WMA rangeland improvement - 743 acres

Kanosh Bench Winter Range Enhancement - 1,236 acres

Scipio Pass Habitat Enhancement - 1,753 acres

Wild Goose Creek Discretionary Seed - 204 acres

Water Canyon Forage Enhancement Phase #2 - 656 acres

Fillmore Nixon WMA Habitat Improvement - 331 acres

Twitchell Canyon Fire Rehab - 9 acres

Beaver/Fillmore WMA Unauthorized Road Closures - 81 acres

Youngsfield/Nixon WMA Herbicide Treatment - 743 acres

Black Cedar Hill Chaining Treatment - 393 acres

Fillmore Nixon WMA North Habitat Improvement - 718 acres
Fillmore Halfway Hill WMA Habitat Improvement - 639 acres

Widemouth Canyon Chaining Phase IV - 905 acres

West Pahvant Habitat Restoration - 862 acres

Meadow Phase I - 388 acres

Ezra Flat winter range restoration - 1,737 acres

Pioneer WMA Bullhog - 287 acres

Widemouth Canyon Chaining Phase V - 1,901 acres

Pahvant spring rehabilitation - 1 acre

Pioneer WMA Road Improvement Project - 11 acres

Widemouth Canyon Project Phase VI - 1,209 acres

North Fillmore WMA Chaining and Pipeline Project - 1,099 acres

Black Cedar Habitat Restoration - 1,483 acres

Loafers Canyon Project Phase II - 1,745 acres

# Current projects:

FFO Meadow Phase 2 - 402 acres
FFO Meadow Phase 3 - 343 acres
North Canyon Revegetation Project - 1,031 acres
Solitude Fire Revegatation Project - 1,076 acres
Dry Creek Meadow Canyon Phase II Restoration Project - 4,156 acres

# **LIMITING FACTORS TO MEETING OBJECTIVES**

<u>Crop Depredation</u>: Crop depredation near Fillmore, Holden, Scipio, and Kanosh is a concern. Steps to minimize depredation as prescribed by state law and DWR policy will be implemented as needed.

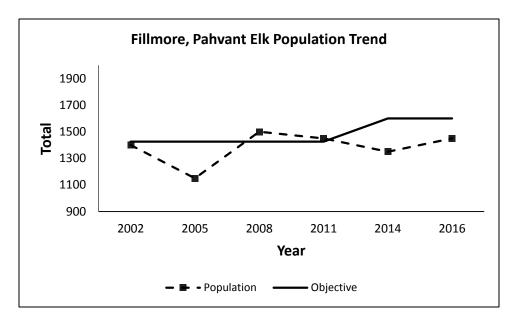
<u>Highway mortality</u>: I-70 and I-15 have been a source of highway mortality for elk. North and South lane fencing on I-70 and portions of I-15 have been completed which significantly decreased ungulate mortality. Additional fencing of I-15 between Cove Fort and Kanosh has been planned is being discussed and would reduce highway mortality in that area. Highway 50 has also been a source of mortality for elk.

<u>Habitat</u>: Invasion by spruce-fir and pinyon-juniper has reduced the productivity of much of the summer and winter ranges for elk. Heavy human activity along the Piute ATV trail may also be responsible for reducing elk use of traditional calving areas and increasing use of posted private land and roadless areas on the forest.

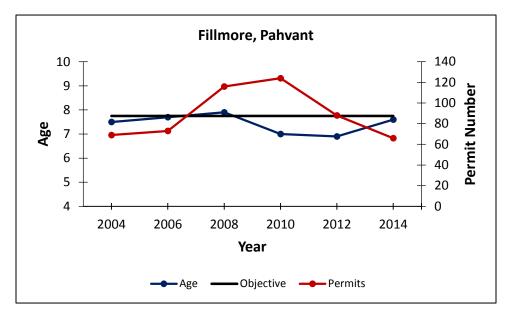
<u>Travel Corridors</u>: The fencing of I-15 and I-70 has limited elk migration to important winter habitat in the Church Hills and Cove Fort areas. Additional planned fencing of I-15 between Cove Fort and Kanosh will restrict elk access to wintering areas west of I-15. Winter range damage on the east side of I-15 could become a potential problem if elk populations become too large.

<u>Elk Densities</u>: Elk nursery herds in the Chalk Creek Drainage and areas near Skinner Hollow have become quite large during the summer and some damage is occurring in aspen and riparian communities. Cow hunts focusing on reducing the size of these herds should be considered when necessary.

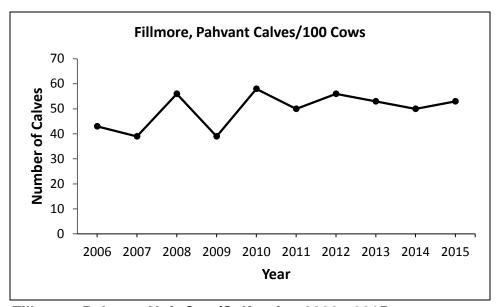
# **APPENDIX**



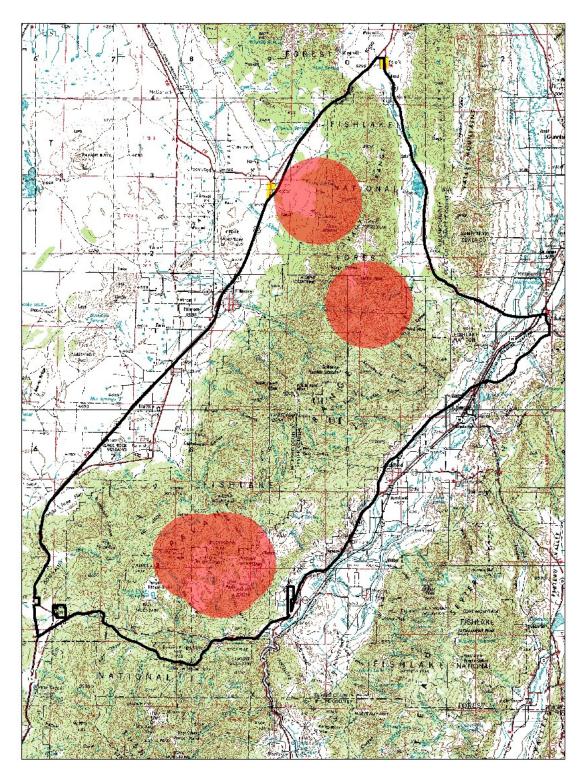
Fillmore Unit elk population trends, Utah 2002-2016.



Average Ages of harvested bulls and permit numbers for the Fillmore, Pahvant Unit



Fillmore, Pahvant Unit Cow/Calf ratios 2006 - 2015



Important elk calving habitat on the Fillmore Unit