

Virginia Mountains Vegetation Treatments Project

PUBLIC SCOPING

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Bureau of Land Management
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BLM Seeks Input on the Virginia Mountains Vegetation Treatments Project

Introduction. The Bureau of Land Management (BLM), Carson City District, Sierra Front Field Office is proposing a vegetation treatments project in the Virginia Mountains area north of Reno and west of Pyramid Lake in Washoe County, Nevada. The Planning Area for the *Virginia Mountains Vegetation Treatments Project* (Project) is approximately 193,213 acres (Figure 1). The Proposed Action is to implement vegetation treatments on approximately 30,387 acres (Project Area) (Figure 2) using a landscape-level approach to identify and prioritize treatments to increase the resistance and resilience of plant communities to disturbance. The Project would be implemented over a 10-year period to increase the resistance and resilience of plant communities to disturbance. Implementation of the Project would not be anticipated to occur until 2017. Due to seasonal restrictions for wildlife, most treatments would occur during the late summer and fall. Approximately 2,000 to 3,000 acres would be treated each year.

In order to fulfill the requirements of the National Environmental Policy Act and National Historic Preservation Act, an environmental assessment (EA) to evaluate the potential effects of vegetation treatments will be prepared by the BLM.

The Council on Environmental Quality NEPA regulations require agencies to provide public notice of meetings and the availability of environmental documents.

The NHPA regulations for compliance with Section 106 requires agencies to provide the public with information about an 'undertaking' and its effects, and to seek public comment.

Purpose and Need. The purpose and need of the proposed Project is to restore the balance of perennial grasses, shrubs, and trees in the Virginia Mountains area to:

- Reduce the potential of large-scale high severity wildland fire;
- Provide for public and firefighter safety and protection of property and infrastructure;
- Maintain sagebrush habitat, riparian plant communities, wet meadows, and springs;
- Protect and enhance historic juniper woodland habitat; and
- Provide woodland products to the public, tribes, and commercial entities.

The Proposed Action is to identify and prioritize treatments to maintain and enhance rangeland health. Specific treatments are proposed for strategically located treatment units based on vegetation condition and objectives. Proposed treatments include mechanical mastication, mechanical removal, hand cutting, chemical treatments, chaining, and seeding (Figure 5). A large focus of this Project would be to improve and protect greater sage-grouse habitat (Figure 8), and treatments would be designed to address threats to greater sage-grouse from invasive annual grasses, wildfires, and conifer expansion.

Land Use Plan Conformance. The Proposed Action and Alternatives described below are in conformance with the Carson City Field Office Consolidated Resource Management Plan (2001):

- FIR-2.1 Restore fire as an integral part of the ecosystem, improve the diversity of vegetation and to reduce fire hazard fuels;
- FOR-1.1 Forest and woodland management will be based on the principles of multiple use, sustained yield, and ecosystem management;
- LSG-1.1: Maintain or improve the condition of the public rangelands to enhance productivity for all rangeland and watershed values;
- RIP-2.1 Protect and maintain existing and potential fisheries and riparian areas in good or better condition (proper functioning condition);
- WLD-2.4 Maintain and improve wildlife habitat, including riparian/stream habitats, and reduce habitat conflicts while providing for other appropriate uses; and
- WLD-6.4 Wildlife habitat improvement projects will be guided, in the most part, by provisions in activity level plans such as habitat management plans, or interdisciplinary activity plans. These plans will be developed through consultation with interested parties and will be coordinated with livestock, wild horse, and wilderness plans. These plans will be focused on rehabilitation and improvement of wildlife habitat through protective fencing, water developments, grazing management, and vegetation treatments.

The EA that will be prepared for this Project will be in conformance with the *Nevada and Northeastern California Greater Sage-Grouse Land Use Plan Amendment*.

Early Notifications and Outreach. The BLM held several internal meetings on December 17, 2014, and January 26, February 23, and April 2, 2015 to develop this Project. The BLM also conducted outreach with the Nevada Department of Wildlife and the Natural Resources Conservation Service.

The Pyramid Lake Paiute Tribe, Reno-Sparks Indian Colony, Washoe Tribe of Nevada and California, and Susanville Indian Rancheria were provided early information on this Project on February 20, 2015. On September 25, 2015 the BLM provided additional information and maps to the tribes.

Alternatives. The BLM would evaluate, at a minimum, a No Action Alternative, which would not authorize any vegetation treatments in the Virginia Mountains, and a Proposed Action, which would authorize vegetation treatments in the Virginia Mountains. Additional alternatives may be analyzed based on public input from scoping.

No Action –

The purpose of the No Action Alternative is to provide the baseline conditions under the current management of the Planning Area. On the basis of the No Action Alternative, the BLM is able to evaluate the degree of change from the current situation to what would occur under implementation of any other alternative. The Proposed Action would represent a change in BLM's current management of the Planning Area.

The current trends in vegetation would continue. Juniper trees would continue to increase in density and expand into sagebrush communities and the health of shrub and understory plants would continue to decline. Conifers would continue to invade riparian areas and cause them to decline in health. Hazardous fuel conditions would continue to accumulate beyond levels representative of the natural (historic) fire regime and threaten to damage the sagebrush, woodland, and riparian habitats through the high risk of intense wildfires difficult to control.

Proposed Action -

The proposed vegetation treatments may be implemented individually or in combination depending on site conditions within the treatment units; if it is determined that a type of treatment is not appropriate for a specific site within a treatment unit it would not be implemented on that site. Specific treatment units have been evaluated to determine the most appropriate treatment method and resource protection measures based on slope, aspect, terrain, soil, vegetation composition, vegetation condition, amount of fuel/biomass needed to be removed, overall access on site, visual disturbance, and proximity to major roads.

The following is a summary of each treatment unit (Figure 2):

1. Winnemucca Ranch (578 acres): The treatment unit is located along the Winnemucca Ranch Road north of Dry Valley Creek. The fuel break is strategically located to reduce the potential for a large-scale high severity wildland fire that could threaten priority sage-grouse habitat located in the Spanish Flat area. This treatment would also improve access and reduce response times during initial attack firefighting activities. The juniper density varies from low to high. While the understory is present, juniper trees are in the process of increasing in dominance. The primary treatment method would be mastication.
2. Dry Valley South (1,254 acres): The treatment unit is located along a dirt road that runs east to west between Dry Valley and Winnemucca Valley. The fuel break is strategically located to reduce the potential for a large-scale high severity wildland fire that could threaten priority sage-grouse habitat located in the Sugarloaf, Vinegar Peak and Spanish Flat areas. This treatment would also improve access and reduce response times during initial attack firefighting activities. The juniper density varies from low to high. While the understory is present, juniper trees are in the process of increasing in dominance. The primary treatment method would be mastication.

3. Dry Valley North (532 acres): The treatment unit runs along two parallel dirt roads that run north from Dry Valley. This area burned in the 1999 Fish 2 fire. The vegetation is currently a mixture of annual grasses (cheatgrass) and seeded species from the emergency stabilization and restoration (ESR) efforts post fire in 2000. The fuel break would break up the horizontal continuity of the existing vegetation in order to slow fire progression. The primary treatment method would be a combination mowing and herbicide application.
4. Dogskin (1,703 acres): This treatment unit is a north to south dirt road system that is strategically located between the Dogskin and Seven Lakes Mountain Ranges. This area is heavily encroached with juniper, but still exhibits good understory values. Permits for the collection of the forest products would be issued to the public, local tribal members, commercial forest product businesses, and other interested parties for forest products generated by treatments in this unit. All required surveys and clearances would be completed and appropriate site mitigation measures would be applied before treatment commences. The primary treatment method would be removal before mastication.

The following treatment units are in Phase 1 juniper woodland development (Tausch et al. 2009). Trees are present but shrubs and grasses are the dominant vegetation that influences ecological processes on the site. Removal of the trees would improve greater sage-grouse habitat characteristics and modify fire behavior by reducing fire intensity and spotting potential. The primary treatment method would be lop and scatter.

5. Pah Rah (173 acres)
6. Little Valley (3,453 acres)
7. Big Canyon (3,156 acres)
8. Winnemucca Valley South (3,018 acres)
9. Vinegar (1,289 acres)
10. North Dry Valley (833 acres)
11. South Dry Valley (1,379 acres)
12. Hardscrabble (326 acres)
13. Winnemucca Valley North (4,834 acres): The treatment unit is a combination of Phase 1, 2, and 3 juniper woodland development (Tausch et al. 2009). The unit is strategically located to reduce fire behavior in Winnemucca Valley and create a wildlife corridor between the high country around Spanish Flat and the Dogskin Range. Permits for the collection of the forest products would be issued to the public, local tribal members, commercial forest product businesses, and other interested parties for forest products generated by treatments in this unit. All required surveys and clearances would be completed and appropriate site mitigation measures would be applied before treatment commences. The treatment methods would be a combination of removal before mastication and lop and scatter.

The following units are identified for emergency stabilization and restoration (ESR) treatments. The areas should be pre-cleared with a class III survey to allow for prompt ESR activities.

14. Bedell Flat (5,779 acres): There are several large unburned pockets located within Bedell Flat that are at risk of annual grassland conversion post fire. The understory within these areas is degraded, with signs of heavy grazing use and minimal native bunchgrasses observable. A high incidence of cheatgrass is present in the understory as well. These areas have easy access and terrain suitable for drill seeding activities. This would be the preferred application method for ESR treatments in the event of a fire. Past fire treatments in this area have exhibited mixed or poor success, as the area is relatively dry and less resilient than upper elevations. A mixed native/non-native seed mixture of Sandbergs bluegrass, squirreltail, crested wheatgrass, and Wyoming big sagebrush would provide the best chance of maintaining functioning ecosystem components and limiting invasive annual density in these areas.
15. Wildcat Spring (1,018 acres): This area is heavily encroached with juniper, but still exhibits good understory values and a high degree of understory sage grouse cover. Cheatgrass is present to a limited extent within the area. Access is generally good, but several drainages, river cobble, and residual standing dead junipers would preclude drill seeding in most areas. Aerial seeding followed by single pass chaining would be the preferred application method for ESR treatments post fire. Since understory values are degraded but present, with limited cheatgrass observed, a native mixture of Sandbergs bluegrass, squirreltail, and Wyoming or Mountain big sagebrush (dependent upon fire location and site characteristics) should be utilized.
16. Dry Valley Creek (1,062 acres): Multiple fires have impacted the area around Dry Valley Creek. These fires have exhibited poor to little post-fire resilience and poor response to past ESR treatments. These areas also exhibit high incidence of grazing usage, from cattle, wild horses, and antelope. Few perennial plants are observable and are generally located on North/East facing slopes. Several of these areas could be considered as having converted to annual grasslands. These areas are generally accessible, and in mixed terrain. Some areas are rocky and would potentially damage rangeland drills. Drill seeding and aerial seeding/single pass chaining would be the preferred ESR treatment. Herbicide application would be considered in areas degraded to the point that they are now annual grasslands. In these areas, initial seeding following the fire event would be needed, followed by assessment, restriction to grazing, follow up spraying, and re-seeding as appropriate. Seed mixes in these areas would include Sandbergs bluegrass, squirreltail, crested wheatgrass, and forage kochia.

The following is a summary of each treatment method. Table 1 below shows which treatment methods are proposed for each treatment unit (Figure 5). Table 2 below shows the approximate number of acres to be treated by each treatment method.

- Mechanical Mastication: Juniper trees and/or shrubs (brush) would be removed from ecological sites by a mastication process which grinds up woody plant material. Due to mechanical limitations of the equipment, mastication treatments are limited to areas with less than a 30 percent slope. In these areas, hand cutting and/or pile burning would be used to meet treatment objectives. Mastication treatments are typically used to restore

ecological balance in plant communities, provide for increased plant diversity by reducing a dominant species, stimulate new plant growth and/or reduce fuel continuity and potential fire intensity. The pre-treatment condition of the plant community would be considered relative to the management goals. Plant communities in any condition (no understory to intact understory) may be treated.

Trees/brush would be ground with an attachment mounted on machinery such as front-end loaders, tractors, excavators, skidders etc., the machine may have rubber tires, rubber tracks or metal tracks. Trees could be thinned or all cut depending on objectives. Stump height would be less than six inches and the products of grinding would generally not exceed two feet in length. Mechanical equipment would be parked and serviced daily in small (less than ¼ acre) road accessible staging areas located on public land on the units designated for mechanical treatment. It can be expected that the vegetation and soils in the staging areas would be effected more than the general Project area due to the frequency of equipment activity on the sites.

A general overview of masticating equipment can be found in the Understory Biomass Reduction Methods and Equipment Catalog (USDA Forest Service 2000).

- Hand Cutting: Hand cutting juniper trees would occur on ecological sites where trees are encroaching into landscapes once dominated by shrubs and herbaceous vegetation and into riparian areas. These sites range from open sagebrush sites with scattered young juniper trees to sagebrush sites where young juniper woodlands are threatening to deplete desirable understory vegetation to riparian sites with juniper trees encroaching into riparian vegetation.

Chainsaw treatments would include lop and scatter or piling and burning. The treatment would be conducted by personnel on foot using hand tools and chainsaws. Crew size would vary but typically ranges from two to 20 people. Cut trees may be removed by non-mechanical methods, chipped with a mechanical chipper working on an existing road, lopped and scattered and/or piled and burned, based on site evaluation and objectives. Stump height would be less than six inches and any residual biomass would not exceed three feet in height.

- Mechanical Removal: Mechanical removal of juniper trees would occur on ecological sites that range from little desired understory vegetation to remnant desirable understory vegetation that is at risk of being depleted. Mechanical removal would only occur in units designated for the treatment and may not occur on entire units designated for treatment.

Treatment includes the mechanical removal of entire trees or portions of trees for personal use or commercial sale. Rubber tired/tracked or metal tracked mechanized equipment would be used to cut, either skid or above ground haul, and remove entire trees or portions of trees. Shearing would include separating the tree from the stump, less than six inches from the ground. Once the trees are sheared, they would be skidded or hauled to a designated landing or processing area and be hauled off site. Mechanical equipment would be parked and serviced daily on (less than ¼ acre) road accessible

landings or processing areas located on public land on the units designated for mechanical removal. It can be expected that the vegetation and soils on any skid/haul roads or landings or processing areas would be effected more than the general Project area due to the frequency of equipment activity on the sites.

- Chemical Treatments: Herbicide applications may be required following mechanical treatment to reduce the occurrence of invasive species/noxious weeds. This would involve the application of herbicides at certain plant growth stages to suppress or kill the plant. The use of specific herbicide active ingredients and formulations on BLM lands in Nevada was authorized by the Record of Decision for the *17 Western States Vegetation Management Programmatic Environmental Impact Statement* (PEIS) (BLM 2007a). The PEIS identifies potential impacts to the natural and human environment from the use of herbicides, incorporates standard operating procedures and mitigation measures to ensure the protection of resources, and approves active ingredients in specific herbicides for use on western public lands. The Carson City District completed an *Integrated Weed Management Plan/Programmatic Environmental Assessment* in 2015 (BLM 2015).

Imazapic herbicide treatments would be used to suppress non-native annuals including cheatgrass in order to establish grasses, forbs and shrubs to the treatment areas. The herbicide would be incorporated into a tank mix of water, surfactants, and adjuvants and applied at a rate in accordance with the label, State law, and the PEIS (BLM 2007). Imazapic kills plants by inhibiting the production of branched chain amino acids, which are necessary for protein synthesis and cell growth. Imazapic would be used as a preemergent and is best applied to the treatment area(s) in late fall or early spring.

- Pile Burning: Pile burning would be considered in order to manage surface fuel loading and where other treatment methods are not feasible (up to 10 percent of each treatment area). The treatment includes the burning of hand constructed piles of residual biomass (e.g. branches, twigs), piles typically no larger than six feet tall and six feet in diameter, scattered within a treatment area. The number of piles per acre would vary depending on tree density and the treatment prescription. Hand held tools such as flares, drip torches and/or flammable gel packs may be used to ignite piles. Pile burns would be conducted under a burn plan, a site-specific implementation document which is a legal document that provides the agency administrator the information needed to approve the plan and the burn boss with all the information needed to safely and effectively implement the burn. Several factors are considered when determining whether to burn or not and designing a burn plan and implementing a prescribed burn. These factors include location, weather conditions, vegetation types, slope, fuel moisture content, risks to property and structures and potential impacts to air quality and land use. Pile burns would only be conducted in the late fall, winter and spring under low spread potential conditions (e.g. following precipitation, with snow on ground). The objective of pile burning would be to consume 80-100 percent of the piled biomass.
- Seeding: The seeding of native and non-native species may be conducted as a follow up for any treatment unit(s) where existing herbaceous understory has been compromised and is not sufficient for natural establishment. Seeding treatment includes ground-based

or aerial broadcast application of seed. Seeding method to be determined based on terrain, soil type, soil moisture, and seed species. Seedlings may be planted using gas powered augers to dig a four inch diameter by eighteen inch deep hole. Seedlings would be planted by hand. Seedlings may be temporarily fenced or tubed. Fencing would consist of barbwire, chicken wire, construction fence or other type of fencing with t-posts.

- Chaining: This treatment method would involve the use of two bulldozers with a 60 lb. chain placed in a “J” shape across the ground. The distance in between the dozers can be up to 300 feet depending on the terrain. As the dozers pass all vegetative material including burned trees and shrubs are disturbed, uprooted, and crushed.

References

- Bureau of Land Management (BLM). 2007. *Vegetation Treatments on Bureau of Land Management Lands in 17 Western States Programmatic Environmental Impact Statement* (FES 07-21). Washington, D.C. June.
- _____. 2007a. *Vegetation Treatments Using Herbicides on Bureau of Land Management Lands in 17 Western States Programmatic Environmental Impact Statement, Record of Decision*. Washington, D.C. September.
- _____. 2015. *Carson City District Integrated Weed Management Plan/Programmatic Environmental Assessment*. Carson City, Nevada. July.
- Tausch, R. J.; Miller, R. F.; Roundy, B. A.; Chambers, J. C. 2009. *Pinon and Juniper Field Guide: Asking the Right Questions to Select Appropriate Management Actions*. U.S. Geological Survey Circular 1335. Reston, Virginia.
- U.S. Department of Agriculture (USDA). Forest Service, Technology & Development Program. 2000. *Understory Biomass Reduction Methods and Equipment Catalog*.

Table 1. Proposed Treatment Methods by Treatment Unit.

Treatment Unit	Treatment Method						
	Hand Cutting	Mechanical Mastication	Mechanical Removal	Pile Burning	Seeding	Chemical	Chaining
Winnemucca Ranch		X		X	X	X	
Dry Valley South		X		X	X	X	
Dry Valley North		X			X	X	
Dogskin Fuel Break		X	X	X	X	X	
Pah Rah	X						
Little Valley	X						
Big Canyon	X						
Winnemucca Valley	X						
Vinegar	X						
North Dry Valley	X						
South Dry Valley	X						
Hardscrabble	X						
Winnemucca Valley		X	X	X	X	X	
Bedell Flat					X	X	
Wildcat Spring					X	X	X
Dry Valley Creek					X	X	X

Table 2. Summary of Acres by Treatment Method.

Treatment Method	Acres	% of Project Area	% of Planning Area
Hand Cutting	13,627	45	7
Mechanical Mastication	8,901	29	5
Mechanical Removal	6,537	22	3
Pile Burning	837	3	0.4
Seeding	16,760	55	9
Chemical	16,760	55	9
Chaining	2,080	7	1

Resources Considered for Analysis

The following resources were considered during an internal interdisciplinary team meeting on this proposal held on September 28, 2015. Based on that review, resources *present* and *may be affected* by this proposal would be analyzed in the draft EA.

Category I, Supplemental Authorities.

Resource	Present Yes/No	Affected Yes/No	Rationale
Air Quality	Y	Y	To be analyzed in the draft EA.
Areas of Critical Environmental Concern	Y	N	The Incandescent Rocks ACEC is not within a proposed Project treatment unit.
Cultural Resources	Y	Y	To be analyzed in the draft EA.
Environmental Justice	N		Resource not present.
Farm Lands (prime or unique)	N		Resource not present.
Floodplains	N		Resource not present.
Noxious Weeds and Invasive Plant Species	Y	Y	To be analyzed in the draft EA.
Migratory Birds	Y	Y	To be analyzed in the draft EA.
Native American Religious Concerns	Y	Y	To be analyzed in the draft EA.
Threatened or Endangered Species (Animals)	N		Resource not present.
Threatened or Endangered Species (Plants)	Y	N	No Project activities are proposed in the vicinity of critical habitat for Webber's ivesia.
Wastes, Hazardous or Solid	N		Resource not present.
Water Quality (Surface/Ground)	Y	Y	To be analyzed in the draft EA.
Wetlands/Riparian Zones	Y	Y	To be analyzed in the draft EA.
Wild and Scenic Rivers	N		Resource not present.
Wilderness/WSA	N		Resource not present.

Category II, Other Resources.

Resource or Issue**	Present Yes/No	Affected Yes/No	Rationale
BLM Sensitive Species (Animals)	Y	Y	To be analyzed in the draft EA.
BLM Sensitive Species (Plants)	Y	Y	To be analyzed in the draft EA.
Fire Management/Vegetation	Y	Y	To be analyzed in the draft EA.
Forest Resources	Y	Y	To be analyzed in the draft EA.
General Wildlife	Y	Y	To be analyzed in the draft EA.
Global Climate Change	Y	N	Although there is public and scientific debate about human-caused global climate change, no methodology currently exists to analyze to what extent the negligible contributions of greenhouse gases (GHG) would contribute to climate change from implementation of the Proposed Action.
Greenhouse Gas Emissions	Y	Y	See Air Quality section.
Lands and Realty	Y	N	Although right-of-ways are present in the Planning area, none of the alternatives would affect these authorizations and activities.
Lands with Wilderness Characteristics	Y	To Be Determined	The Tule Peak LWC has been proposed in the resource management plan revision. The management objectives have not been determined.
Livestock Grazing	Y	Y	To be analyzed in the draft EA.
Minerals	Y	N	Although mining claims are present in the Planning area, none of the alternatives would affect any on-going mining activities.
Paleontological	Y	N	Although paleontological resources are present in the Planning area, the Proposed Action does not include surface-disturbing activities that would expose or adversely affect the resources.
Recreation	Y	N	Although dispersed recreation is present in the Planning area, none of the alternatives would affect recreational activities.
Socioeconomics	N		Resource not present.
Soils	Y	Y	To be analyzed in the draft EA.
Travel Management	Y	N	Although dispersed recreation is present in the Planning area, none of the alternatives would affect recreational access.
Vegetation	Y	Y	To be analyzed in the draft EA.
Visual Resource Management	Y	Y	To be analyzed in the draft EA.
Wild Horses and Burros	Y	Y	To be analyzed in the draft EA.

**** Public Workshop and Field Trip ****

A public workshop will be held on Wednesday October 21, 2015 at the BLM Palomino Valley Fire Station. The Fire Station is located at 5605 Grass Valley Road in Reno. The workshop will be held from 6:30 pm until 8 pm. At 6:45 pm a presentation on the project will be given. Staff will be available to provide Project information and maps will be available for review.

A public field trip will be held on Saturday October 24, 2015. Attendees must RSVP Keith Barker, Fire Ecologist, at (775) 885-6000 or VirginiaMtns@blm.gov by Thursday October 22 for time and meeting location.

How to Comment. The BLM is seeking your input at this early stage. In order to fulfill the requirements of the National Environmental Policy Act and National Historic Preservation Act, and to evaluate the potential effects of vegetation treatments will be prepared by the BLM. The EA would likely be available for public review in the summer 2016.

Privacy notice: before including your address, phone number, email address, or any other personal identifying information in your comments, be advised that your entire comment, including personal identifying information, may be made publicly available at any time. While individuals may request that the BLM withhold personal identifying information from public review, the BLM cannot guarantee it will be able to do so. If you wish us to withhold your personal information, you must state this at the beginning of your comment. We will make all submissions from organizations or businesses available for public disclosure in their entirety.

The 60-day scoping period is from September 29 until November 27, 2015.

For more information contact: Keith Barker, Fire Ecologist or Pilar Ziegler, Wildlife Biologist, at 775-885-6000 or VirginiaMtns@blm.gov.