

**USDI, Bureau of Land Management
Burns District**

DECISION RECORD

**Miller Homestead Emergency Stabilization and Rehabilitation Plan
Environmental Assessment
OR- B060-2012-0047-EA**

BACKGROUND

The Burns District Bureau of Land Management (BLM) has prepared an Environmental Assessment (EA) proposing to implement the Emergency Stabilization and Burned Area Rehabilitation (ES&R) Plan on the Miller Homestead fire located on BLM administered lands managed by the BLM Burns District Office, as well as portions of the Malheur National Wildlife Refuge (further referred to as Refuge) managed by the United States Fish and Wildlife Service (USFWS), and privately-owned lands.

The Miller Homestead Fire (Fire Number G1G1) was ignited by lightning associated with dry thunderstorms on July 8, 2012 and was contained on July 24, 2012. The fire burned a total of 160,801 acres, comprising 146,798 acres of BLM-administered land, 1,209 acres of Refuge, and 12,794 acres of private land. The wildfire started approximately 12 miles west of Frenchglen, Oregon, and began burning in grass and brush on BLM-administered land.

COMPLIANCE

The attached EA (*Miller Homestead Emergency Stabilization and Rehabilitation Plan*) OR-B060-2012-0047-EA, is tiered to the Three Rivers Proposed Resource Management Plan/Final Environmental Impact Statement (PRMP/FEIS), the Andrews Management Unit/Steens Mountain Cooperative Management and Protection Area (AMU/CMPA) PRMP/FEIS, and the 2010 Vegetation Treatments Using Herbicides on BLM Lands in Oregon FEIS. There will be no substantial broad societal or regional impacts not previously considered in these planning documents; and relevant information contained therein is incorporated by reference. The Proposed Action has been designed to conform to the following documents, which direct and provide the framework for management of BLM lands within Burns District:

- Taylor Grazing Act (43 U.S.C. 315), 1934
- The National Environmental Policy Act (42 U.S.C. 4320-4347), 1970
- Wild Free-Roaming Horses and Burros Act (16 U.S.C. 1331-1340), 1971
- Federal Land Policy and Management Act (43 U.S.C. 1701), 1976
- Public Rangelands Improvement Act (43 U.S.C. 1901), 1978
- August 12, 1997 Standards for Rangeland Health and Guidelines for Livestock Management for Public Lands Administered by the BLM in the States of Oregon and Washington

- 1998 Burns District Noxious Weed Management Program EA (OR-020-98-05)
- 2000 Jack Mountain Communication Site Management Plan EA (OR-025-00-32)
- 2007 Vegetation Treatments Using Herbicides on BLM lands in 17 Western States ROD
- 2010 Vegetation Treatments Using Herbicides on BLM Lands in Oregon Record of Decision (ROD)
- Greater Sage-grouse and Sagebrush-steppe Ecosystems Management Guidelines (BLM-2000)
- BLM National Sage-grouse Habitat Conservation Strategy (2004)
- Clean Water Act (33 U.S.C. 1251 - 1376; Chapter 758; P.L. 845, June 30, 1948; 62 Stat. 1155)
- Clean Air Act, 42 U.S.C. 7470, et seq., as amended
- National Historic Preservation Act (16 U.S.C. 470)
- Executive Order 12372, Intergovernmental Review
- Executive Order 13112, Invasive Species
- Instruction Memorandum WO-2012-043, Greater Sage-Grouse Interim Management Policies and Procedures issued December 27, 2011
- State, local, and Tribal laws, regulations, and land use plans

DECISION

Having considered the Proposed Action, No Action Alternative, Alternatives Considered but not Analyzed in Detail, and associated impacts and based on analysis in EA OR- B060-2012-0047-EA, it is my decision to implement the Proposed Action which will implement the ES&R plan and provide for the application of specific herbicides on noxious weeds located within a project area encompassing the fire perimeter. Additionally, a Finding of No Significant Impact (FONSI) found the Proposed Action analyzed in OR-B060-2012-0047-EA did not constitute a major Federal action that will adversely impact the quality of the human environment. Therefore, an Environmental Impact Statement was unnecessary and will not be prepared.

The Proposed Action was developed by the BLM Interdisciplinary Team (IDT) in order to address identified resource concerns following the Miller Homestead Fire. The Proposed Action will include the following elements:

Proposed Emergency Stabilization and Burned Area Rehabilitation Treatments

- *Aerial Seeding*

Approximately 3,500 acres within the Miller Homestead Fire will be aurally seeded. The area to be seeded is adjacent to Highway 205 and consists of a rim and steep slope leading down to the highway. The goal of the treatment is to establish protective ground cover of perennial vegetation to protect the exposed soils from wind and water erosion, and to stabilize the rim rock, decreasing the risk of rocks entering the highway. The majority of this area is unsuitable for drill seeding due to rockiness, slope, and the presence of cultural sites. Seeding will be done utilizing aircraft in the late fall to early winter. The aerial seed mix will consist of species selected for specific characteristics, as well as on the types, previous vegetation, and ecological sites within the area. See Appendix A, Maps 4, 5, and 6 for General Vegetation, General Soils, and Ecological Sites within the burned area, respectively. The seed mix was selected by the IDT, taking treatment goals into consideration. The mix will contain: Forage kochia (*Bassia prostrata* (L.) A.J. Scott), Bluebunch wheatgrass, Great Basin Wild Rye (*Leymus cinereus* (Scribn. & Merr.) Á. Löve), crested wheatgrass (*Agropyron cristatum* (L.) Gaertn.), and western wheatgrass (*Pascopyrum smithii* (Rydb.) Á. Löve). When possible, regional seed sources will be utilized. Table 1 shows the planned seed mix with the estimated pure live seed (PLS) pounds per acre and percent composition for each species.

Table 1: Aerial Seed Mix

| SPECIES | %PLS ¹ | % of Mix | PLS Lbs./A c. | PLS Lbs. | Bulk Lbs./A c. | Bulk Lbs. |
|--------------------------------|-------------------|----------|---------------|----------|----------------|-----------|
| Crested Wheatgrass - Hycrest | 0.81 | 61.3 | 4.90 | 17,164 | 6.05 | 21,200 |
| Bluebunch Wheatgrass - Anatone | 0.77 | 4.9 | 0.33 | 1,147 | 0.43 | 1,500 |
| Basin Wildrye - Trailhead | 0.77 | 1 | 0.07 | 235 | 0.09 | 300 |
| Western Wheatgrass - Rosana | 0.76 | 28.2 | 2.54 | 8,892 | 3.34 | 11,700 |
| Forage Kochia - Immigrant | 0.51 | 4.6 | 0.05 | 161 | 0.09 | 300 |

See Map 8 for the proposed aerial seeding location. The exact seeding location may vary due to on the ground conditions prior to seeding occurring.

¹ PLS=Pure Live Seed

Ground Seeding

This treatment consists of drill seeding approximately 22,000 acres on the Miller Homestead Fire. Seeding will be done utilizing rangeland drills. In areas of cultural concern or limited access by four wheelers broadcast seeders with or without a chain harrow may be used. Seeding will occur in the fall and early winter of 2012, and possibly into 2013 (weather dependent). A combination of native and desirable non-native species will be utilized in the seed mixes. Seed mixes were selected by the IDT with utilization of each mix determined by the given site's risk for annual grass establishment (i.e. "high cheatgrass risk" and "extreme cheatgrass risk") and the potential to reestablish Wyoming big sagebrush (primarily if Wyoming big sagebrush had existed on the site prior to the fire). The extreme cheatgrass risk mix will be for areas at lower elevations, and/or southern aspects where cheatgrass has been observed establishing aggressively following disturbance, and/or on sites known to have high densities of cheatgrass before the fire. The second mix, the high cheatgrass risk mix (with sagebrush), will be for the types of ecological sites where cheatgrass has been observed aggressively establishing, and had cheatgrass present before the fire. Areas that will be selected to be seeded are expected to show large increases in annual grasses if left untreated. These sites are located along roads regularly used during fire suppression activities and will also be at risk of additional annual grass seeds being transferred to the site. Soil data, ecological site data, vegetation data, and previous knowledge of the area will be used in selecting seeding sites. See Appendix A, Maps 4, 5, and 6 for General Vegetation, General Soils, and Ecological Sites within the burned area, respectively. Approximately 17,000 acres will be seeded using the extreme cheatgrass risk mix and an additional 1,500 acres (approximately) will be the extreme cheatgrass risk mix plus Wyoming big sagebrush seed. Where possible, these areas may be seeded in strips, with one strip being the extreme cheatgrass mix, and the alternating strips being Wyoming big sagebrush, rather than directly adding the sagebrush to the mix. Approximately 3,500 acres will be seeded with the high cheatgrass risk mix (with sagebrush). An additional 912 acres of Wyoming big sagebrush will be seeded alone, at a target rate of 0.2 PLS pounds/acre. All sites that will be seeded with sagebrush will be selected based on the chance of seeding success. These include north slopes, deeper soils, ecological sites, and presence of Wyoming big sagebrush on site prior to the fire. Rangeland drills will be set to maximize the chance of success for each seed mix/species. A portion of the tubes on the drills may be pulled to increase variation for seed sites and reduce the visual impression of vegetative rows across the treatment area. The species in these seed mixes were selected for specific characteristics. They include western yarrow (*Achillea millefolium* L.), Wyoming big sagebrush, crested wheatgrass, Great Basin wild rye, Indian ricegrass, bottlebrush squirreltail, bluebunch

wheatgrass, Lewis flax (*Linum lewisii* Pursh), dryland alfalfa (*Medicago sativa* L.), and forage kochia. When possible, regional seed sources will be utilized. See Map 7 for possible locations of seedings by seed mix. The drill seeding locations and specific seed mixes in each location may vary depending on ground characteristics; all drill seeding will occur within the Miller Homestead Fire Perimeter. Estimated seed mixes are shown in Tables 2, 3, and 4 below.

Table 2: Extreme Cheatgrass Risk Mix

| SPECIES | %PL S | % of Mix | PLS Lbs./Ac. | PLS Lbs. | Bulk Lbs./A c. | Bulk Lbs. |
|--|--------------|-----------------|---------------------|-----------------|-----------------------|------------------|
| Crested Wheatgrass - Hycrest | 0.81 | 69.7 | 5.59 | 95,052 | 6.90 | 117,350 |
| Bluebunch Wheatgrass - Anatone | 0.77 | 6.0 | 0.53 | 9,078 | 0.69 | 11,800 |
| Basin Wildrye – Trailhead | 0.77 | 3.7 | 0.19 | 3,145 | 0.24 | 4,100 |
| Indian Ricegrass - Nezpar | 0.76 | 1.9 | 0.09 | 1,453 | 0.11 | 1,900 |
| Bottlebrush Squirreltail - SI (Harney, OR) | 0.68 | 0.80 | 0.04 | 654 | 0.06 | 950 |
| Lewis Flax - SI (Columbia, OR) | 0.76 | 0.80 | 0.02 | 255 | 0.02 | 300 |
| Western Yarrow | 0.81 | 0.40 | 0.002 | 36 | 0.002 | 45 |
| Alfalfa - Ladak | 0.81 | 10.2 | 0.41 | 6,953 | 0.50 | 8,600 |
| Forage Kochia - Immigrant | 0.51 | 6.5 | 0.10 | 1,657 | 0.19 | 3,250 |

Table 3: Extreme Cheatgrass Risk Mix with Sagebrush

| SPECIES | %PL S | % of Mix | PLS Lbs./A c. | PLS Lbs. | Bulk Lbs./A c. | Bulk Lbs. |
|--|--------------|-----------------|----------------------|-----------------|-----------------------|------------------|
| Crested Wheatgrass - Hycrest | 0.81 | 57.2 | 5.58 | 8,374 | 6.89 | 10,350 |
| Bluebunch Wheatgrass - Anatone | 0.77 | 5.0 | 0.50 | 750 | 0.65 | 950 |
| Basin Wildrye - Trailhead | 0.77 | 0.9 | 0.07 | 108 | 0.09 | 100 |
| Indian Ricegrass - Nezpar | 0.76 | 0.8 | 0.06 | 96 | 0.08 | 150 |
| Bottlebrush Squirreltail - SI (Harney, OR) | 0.68 | 0.6 | 0.04 | 58 | 0.06 | 100 |
| Lewis Flax - SI (Columbia, OR) | 0.76 | 0.6 | 0.01 | 18 | 0.02 | 50 |
| Western Yarrow | 0.81 | 0.4 | 0.002 | 3 | 0.003 | 5 |
| Alfalfa - Ladak | 0.81 | 8.0 | 0.41 | 612 | 0.50 | 750 |
| Forage Kochia - Immigrant | 0.51 | 6.5 | 0.10 | 145 | 0.19 | 300 |
| Wyoming Big Sagebrush | 0.16 | 20 | 0.20 | 300 | 1.25 | 1,875 |

Table 4: High Cheatgrass Risk Mix with Sagebrush

| SPECIES | %PL S | % of Mix | PLS Lbs./A c. | PLS Lbs. | Bulk Lbs./A c. | Bulk Lbs. |
|---|------------------|---------------------|------------------------------|---------------------|-------------------------------|----------------------|
| Crested Wheatgrass - Hycrest | 0.81 | 40 | 3.20 | 11,200 | 3.95 | 13,800 |
| Bluebunch Wheatgrass - Anatone | 0.77 | 23 | 1.62 | 5,659 | 2.10 | 7,350 |
| Basin Wildrye - Trailhead | 0.77 | 1.5 | 0.11 | 367 | 0.14 | 500 |
| Indian Ricegrass - Nezpar | 0.76 | 2.5 | 0.18 | 612 | 0.23 | 800 |
| Bottlebrush Squirreltail - SI (Harney, OR) | 0.68 | 1.3 | 0.08 | 273 | 0.12 | 400 |
| Lewis Flax - SI (Columbia, OR) | 0.76 | 1.0 | 0.02 | 70 | 0.03 | 100 |
| Alfalfa - Ladak | 0.81 | 6.5 | 0.33 | 1,137 | 0.40 | 1,400 |
| Forage Kochia - Immigrant | 0.51 | 4.2 | 0.01 | 51 | 0.03 | 100 |
| Wyoming Big Sagebrush | 0.16 | 20 | 0.20 | 700 | 1.25 | 4,360 |

- ***Seedling Planting***

Sagebrush seedlings (plugs) will be planted on approximately 9,082 acres where the sagebrush was killed by the fire, with approximately 440 plants per acre, arranged to maximize future seed spread. Gathered big sagebrush seed will be sent to a nursery for growing a portion of the seedlings in order to have some site adapted plants available for reestablishment. Seedlings will be planted by contractors or volunteers in the spring. Sagebrush plugs (or bare root stock) planting will be done by hand. Sites will be selected that have soils conducive to hand planting and that have a favorable moisture regime. The identified possible locations for sagebrush planting were selected by determining which sites had the highest chance of success based on suitable soil conditions (indicated by soil survey data), site conditions (precipitation, aspect, etc.), opportunity for spread (slope), and known Wyoming big sagebrush present prior to the burn (based on ecological site inventory data - i.e. the vegetation included dominance or co-dominance by big sagebrush prior to burn). The areas for planting will be prioritized following the recommendations from the Sage-Grouse Conservation Team Meeting on September 24, 2012, which include the leks with high breeding abundance (bird numbers), leks with increasing or stable attendance, areas lacking a sagebrush seed source within three miles of a lek, and the creation of “stepping stones” of habitat between lek sites and mesic (brood-rearing) sites. See Map 7 for the possible locations of sagebrush planting.

- ***Erosion Control Structures***

The Miller Homestead Fire burned through multiple major ephemeral drainages and burned to bare soil in many areas. Up to 200 erosion

control structures (hillslope or in channel treatments) will be placed within or upslope of appropriate drainages. Structures will be constructed of weed-free straw or rock, placed on the surface (no ground disturbance) and anchored with metal posts to resist movement. Height, width, and position will depend on channel morphology and potential for water movement. Contour wattles and check dams will be constructed according to Natural Resources Conservation Service (NRCS) guidelines (USDA 2004 and USDA 2012). Contour wattles are also known as fiber rolls, bio-logs, or straw tubes. They are man-made cylinders of compressed, weed free straw or other fiber, are generally 8 to 12 inches in diameter and 20 to 25 feet long. The casing is jute, nylon, or other photo degradable materials. They are installed in a shallow trench forming a continuous barrier along the contour (across the slope) to intercept water running down a slope. Check dams are a small dam structure used to slow down flow of water and reduce sedimentation, while allowing increased water absorption into the soil. These structures will be located in critical areas of high risk where the threat of sedimentation will cause problems to downstream values. Check dams will only be placed in small drainages (ephemeral or intermittent) with a channel gradient of less than 30 percent. They will not be placed in any incised drainages. Contour wattles may be placed on slopes 50 percent or less. Specific types and locations of erosion control structures will be determined by a BLM hydrologist, familiar with erosion in arid areas.

Along Highway 205, a sediment fence up to 1,000 feet long will be placed in order to stop sediment from moving downslope and entering the highway corridor. The exact location and type of fence will be determined by members of the IDT with input from the BLM hydrologist. The most common type of sediment fence will be a silt fence, anchored with stakes, with the bottom of the fence set into the soil.

Existing catchment basins will be cleaned to collect sediment and ash transported down slope by precipitation until plant cover increases enough to protect the site, and sediment movement returns to pre-fire levels. Cleaning will be necessary to ensure these basins continue to function properly. It may be necessary to clean them multiple times.

A dozer or excavator will be utilized to clean the catchment basins. Disturbance during cleaning will not be greater than what occurred during initial construction. No new catchment basins will be constructed. Cleanout will begin in October to prepare for fall rains. As catchment basins fill with sediment, they will be cleaned as needed, allowing them to continue to collect sediment and ash. Only catchment basins existing within the fire perimeter or downstream from the burned area will be cleaned.

See Map 9 for estimated areas of check dams, the sediment fence, and locations of catchment basins existing within the burned area.

- ***Road Protection and Maintenance***

Culverts within the burned area will be cleaned, as needed, and ditches located along 45 miles of roads within and adjacent to the burned area will be spot cleaned to ensure runoff is able to continue flowing through the culverts and ditches, and no pooling occurs due to clogged culverts, which could result in roads being washed out. Culverts will be cleaned using water pumped at high pressure. Ditches will be cleaned using a road grader. Disturbance will be no more than what occurred during initial ditch construction. See Map 9 for the location of 15 known culverts that may be cleaned. Roads will be spot maintained in areas damaged during suppression activities. Roads will be returned to a condition similar to the condition prior to the fire. This may include blading, grid rolling, and placement of spot rock.

- ***Fence Maintenance and Construction***

The Miller Homestead Fire burned through multiple allotments and pasture boundary fences needed to keep livestock and wild horses out of the burned area until objectives are met and pre-fire management resumed. Approximately 50 miles of 4-wire fence will be reconstructed along identified portions of the fire. Fence reconstruction may be as minimal as the construction of replacement H-braces and rock cribs, but may be as large as full fence replacement, depending on the severity of the fire. In all fence reconstruction, metal materials will be used to the extent possible. One small enclosure fence around a known grave will be replaced, possibly with a decorative fence.

In addition, 20 miles of new temporary (removable) fence will be constructed to keep wild horses and livestock out of the majority of the burn and the reseeded area until objectives are met. Approximately 10.5 miles of protection fence is needed in the Native Pasture of East Warm Springs Allotment and within Warm Springs Herd Management Area (HMA). The remaining 9.5 approximate miles of new fence is needed in Keg Springs Pasture of Keg Springs Allotment to regulate livestock movement within the pasture, protect a seeded area, and allow for proper management of the seeded area. When possible, natural topographic features (rims) will be used in place of fence. All fencing will be required to limit domestic livestock and wild horse grazing until objectives are met. If objectives are not met after two growing seasons, the probability of success will be reevaluated and new management actions will be considered following appropriate National Environmental Protection Act (NEPA) analysis. Cattleguards will be installed where the fence crosses

main roads, including Foster Flat/Matties Ark and Jack Mountain Roads. Where possible, temporary cattleguards will be utilized to limit ground disturbance. The proposed cattleguards will be located at points where a gate will be ineffective, due to the amount of traffic these roads receive and the likelihood of a gate being left open (or damaged if locked) allowing wild horses and livestock back into the protected area. Gates will be installed at all other places the fence crosses roads, as well as in locations needed for proper management of wild horses and livestock.

See Map 9 for locations of estimated locations of temporary protection fences, predicted cattleguard locations, and additional fence construction points.

Removal of these protection fences will occur when they are no longer needed to keep wild horses and livestock out of the area and they are no longer needed for management of burned and seeded areas. This will generally coincide with meeting rehabilitation objectives. Removal of the fence in East Warm Springs Allotment will open up the entire Warm Springs HMA to use by wild horses following recovery of the site.

- ***Wild Horse Relocation***

Once the protection fence is completed, it will be necessary for wild horses within the protected area to be relocated from the burned portion to the unburned portion of the HMA, using a helicopter, to provide necessary forage while allowing vegetation recovery in the burned areas. The relocation of wild horses from this area may require multiple flights to move all wild horses, and then relocate any wild horses that manage to get back into the area.

- ***Water Hauling***

The protection fence will separate wild horses from many of the reliable water sources within the HMA. In order to ensure water availability to the wild horses, water will have to be hauled into the HMA during the period the protection fence is in place. Water will be distributed throughout the HMA to provide the most access for wild horses, while limiting ground disturbance.

- ***Range Improvement Reconstruction***

One spring development and one wildlife guzzler were damaged or destroyed during the wildfire. These developments will be reconstructed or replaced, restoring the functionality of these water sources.

- ***Weed Treatments***

Within the Miller Homestead Fire, 8 species of noxious weeds, totaling 59.6 acres, were present prior to the fire, in addition to areas of cheatgrass. These species include whitetop, scotch thistle, Canada thistle, bull thistle, dalmation toadflax, perennial pepperweed, Russian knapweed, and Mediterranean sage. The fire burned in areas where annual grass is common in the community and medusahead and other noxious weeds are known to be present adjacent to the burned area, including near the location of the fire camp. In many areas within the fire, it burned to mineral soil leaving a receptive seed bed for expansion of invasive species. During the first year, the portion of the burn highest at risk for noxious weeds will be inventoried. This inventory will focus on identifying areas of noxious weeds as well as areas where it appears annual grasses are becoming dominant. The majority of this inventory will be in the portion of the burn directly adjacent to Highway 205 and along major roads within the fire perimeter. This inventory will determine the extent of noxious weed expansion, and small areas will be spot treated, on the ground, with the appropriate approved herbicides and mix ratios or effective mechanical treatment, to prevent expansion when possible. See Table 5 below for possible herbicides, rates, affected species, and season and method of application. Only treatments allowable on Oregon BLM lands in conformance with standard operating procedures and mitigation measures will be used (Appendix E). Herbicides and adjuvant will also be used in compliance with label instructions.

Through an Assistance Agreement, the BLM will utilize the Strategic Weed Attack Team (SWAT) for Early Detection and Rapid Response (EDRR). Large areas of noxious or invasive weeds, if found, will be identified and treated in subsequent years. The Burns District Weeds Specialist will work with the SWAT crew to inventory and spray identified weed patches. Identified areas will be mapped and entered into Geographic Information System. Large patches will be mapped for future treatments. During the second and third year following the fire, the entire burn area will be inventoried with focus along roads, facilities, seeding, and planting locations. Large areas mapped previously will be planned to be treated either on the ground or aurally.

Due to the infestation of Mediterranean sage along Highway 205, and partially within the fire perimeter, it is expected Mediterranean sage will take advantage of the favorable conditions and expand further into the burn area. Due to the size of the existing Mediterranean sage infestation, the Burns District Weed Specialist is proposing treatment on approximately 300 acres surrounding it. Perennial pepperweed and Canadian thistle are present in large infestations on the east boundary of the fire and on Refuge lands directly adjacent to the fire. There is a high

probability these weeds will spread into the burned areas and will require treatment. Mediterranean sage and other noxious weed species will be treated as needed using the most appropriate approved herbicide.

Since cheatgrass was previously present in the fire area, in varying amounts, it is expected it will take advantage of the favorable conditions to increase throughout the burn. If monitoring shows large areas are becoming dominated by these annual grasses, they will be treated by broadcasting on the most appropriate, approved, herbicide, Imazapic, at 6 oz./acre along with a drift control adjuvant also at 6 oz./acre. These treatments, if monitoring shows they are necessary, will occur by helicopter (up to 7,000 acres) or fixed wing aircraft (up to 23,000 acres). Helicopter treatments are necessary for areas that have rough topography and other hazards that prevent the use of fixed-wing application. Fixed-wing aircraft will provide the broadcast application on areas with less topographic variation. Aerial application of herbicides will be done by contract. Application of Imazapic will occur from late summer to early fall in 2013 and 2014 to reduce potential impacts to establishment and survival of seeded species.

See Map 10 for predicted weed treatment areas. No large, aerial broadcast treatments will occur the first year. This will allow the BLM to determine where exactly these treatments will need to occur, if at all. The treatment areas were selected based on existing weed/annual grass infestations and potential of the site to become invaded by annual species. Not all 30,000 acres mentioned above and shown on Map 10 will be treated. Treatment will occur only in areas with weed infestations, and only if needed.

In addition to the currently authorized herbicides, additional herbicide treatments to be used to treat noxious weeds are shown in Table 5, along with the potential target species. The weed species shown in the table are not inclusive and other weed species may be treated with the below herbicides if it is determined to be the most effective herbicide for that species.

Table 5: Potential Herbicide Treatments

| Herbicide & Rate | Season/Method of Application | Examples of Weed Species |
|---|--|---|
| <i>Chlorsulphuron</i> : Telar XP (1 oz./ acre; 0.047 lbs./acre of active ingredient <i>Chlorsulphuron</i>) + 2,4-D (1 qt./acre; 0.95 lbs./acre of active ingredient 2,4D) | Typical application window is during rosette to early flower stage. Sometimes apply in fall on fall rosettes. Application method will be low-boom or spot spray. | Mediterranean Sage Biennial thistles |
| <i>Chlorsulphuron</i> : Telar XP | Typical application window is | White top |

| | | |
|--|---|--|
| (1 oz./ acre; 0.047 lbs./acre of active ingredient Chlorsulphuron) + 2,4-D (1 qt./acre; 0.95 lbs./acre of active ingredient 2,4D) | full flower stage. Application method will be low-boom or spot spray. | |
| <i>Chlorsulphuron</i> : Telar XP (1 oz./ acre; 0.047 lbs./acre of active ingredient Chlorsulphuron) + 2,4-D (1 qt./acre; 0.95 lbs./acre of active ingredient 2,4D) | Typical application window is full flower stage. Application method will be low-boom or spot spray. | Perennial pepperweed |
| <i>Chlorsulphuron</i> : Telar XP (1 oz./ acre; 0.047 lbs./acre of active ingredient Chlorsulphuron) + 2,4-D (1 qt./acre; 0.95 lbs./acre of active ingredient 2,4D) | Typical application window is during rosette to early flower stage. Sometimes apply in fall on fall rosettes. Application method will be low-boom or spot spray. | Canada thistle |
| <i>Clopyralid</i> : Transline (1 pt./acre; 0.37 lbs./acre of active ingredient Clopyralid); may add 2,4-D (1 qt./acre; 0.95 lbs./acre of active ingredient 2,4D); may add <i>Chlorsulphuron</i> : Telar XP (1 oz./ acre; 0.047 lbs./acre of active ingredient Chlorsulphuron) | Typical application window for this type of treatment will be fall (late season) when desirable vegetation is least susceptible to damage. Application method will be low-boom or spot spray. | Canada Thistle |
| <i>Imazapic</i> : Plateau (6 oz./acre; 0.178 lbs./acre of active ingredient Imazapic) | Typical application window is early fall. Application method will be by low-boom or aerial spray. Aerial spray will be limited to infestations 100 acres or greater and/or on smaller infestations where access is limited. | Annual invasive species (including cheatgrass/ medusahead) |

A ground applied sterilant will also be used to treat the areas around power poles, which were dozed to protect the pole, in order to prevent weeds from establishing in those disturbed sites and protect the power poles from burning if a future fire occurs. In addition, a ground applied sterilant will be used to treat the areas for 20 feet around communication

facilities' flammable structures to protect against damage if threatened by future fires. Clearing of vegetation around structures was previously analyzed in EA OR-025-00-32.

- ***Biological Thinning***

When an area is not grazed following a fire, or when grazing is occurring at low levels, fine fuels accumulate, putting an area at risk for a large-scale, high-intensity wildfire. As noted in 43 Code of Federal Regulations (CFR) 4190.1 Effect of wildfire management decision. "(a) Notwithstanding the provisions of 43 CFR 4.21(a)(1), when BLM determines that vegetation, soil or other resources on the public lands are at substantial risk of wildfire due to drought, fuels buildup, or other reasons, or at immediate risk of erosion or other damage due to wildfire, BLM may make a rangeland wildfire management decision effective immediately... Wildfire management includes but is not limited to: (1) Fuel reduction or fuel treatment such as ... biological thinning methods...; and (2) projects to stabilize and rehabilitate lands affected by wildfire." Under these regulations, biological thinning will be allowed to occur within affected allotments in order to biologically thin (by removal) fine fuels and reduce the risk of wildfire.

Biological thinning will be authorized in areas where total utilization of above ground biomass of fine fuels is less than 40 percent after seed set when grasses become dormant, putting the site at substantial risk of wildfire. Biological thinning may also be authorized in areas that become infested with annual grasses. Biological thinning will follow Smith et al. 2012 "Green and Brown" guide recommendations for using Ecologically-Based Invasive Plant Management. This will mean biological thinning will not be allowed when perennial species enter the boot stage until perennial grasses leave the flowering and seed development stage. While the "Green and Brown" guide is focused on annual grasses, the recommendations are made to protect perennial species, and therefore will be applicable to all biological thinning.

Biological thinning will only be authorized if it will not damage ecological processes, and has full IDT consensus and management approval. During periods of biological thinning, fuel in areas receiving treatment will be monitored on a weekly basis, at a minimum, to ensure no ecological damage is occurring and to monitor the percentage of fuel reduction that has occurred. Monitoring will consist of installing temporary utilization cages approximately five feet by five feet in the treatment area, which will not be treated. The Ocular Estimate Method of utilization will be used as described in BLM Technical Reference 4400-3 Rangeland Monitoring: Utilization Studies. Biological thinning will cease when monitoring shows above ground biomass of fine fuels is reduced by 50 percent

(including any reduction caused by permitted livestock grazing, wild horse use, and wildlife).

Biological thinning will be allowed using a cooperative agreement, outlining the terms and conditions mentioned in this document, as well as any other terms and needed depending on the specific site. The specific area where biological thinning is to occur will be identified on a map and included in the cooperative agreement. Supplements and water, if needed, will be allowed to be placed in these areas to help manage the movement of livestock while meeting their nutrient requirements. Where possible, these will be placed in areas of existing disturbance such as reservoirs, roadways, and salting locations. When placed outside of these areas, cultural and botanical clearances will occur, and identified sites will be avoided. Any use occurring outside of the treatment area may be subject to trespass actions. If trespass actions are carried out, that operator will no longer be authorized to participate in biological thinning treatments. If at any point the cooperative agreement is violated, biological thinning will immediately cease and that operator will no longer be authorized to participate in biological thinning treatments. Biological thinning permitting will occur under 43 CFR 4130.5(b)(1) which allows the authorized officer to authorize free use when the primary objective is “the management of vegetation to meet resource objectives...”.

- ***Wild Horse and Livestock Grazing Closure***

The majority of the burned area, including all seeded areas, will be temporarily closed to wild horses and domestic livestock grazing until the vegetation objective of three plants per square meter² are met. Photo and trend monitoring will occur to determine when objectives are met. These objectives will be determined met on a specific location basis (i.e. one pasture or use area may be reopened to grazing while another pasture or use area remains closed). If after two growing seasons objectives are not met, the probability of success will be reevaluated and new management actions will be considered following appropriate NEPA analysis. If objectives are not met due to site dominance by annual grasses, than the livestock grazing closure may be partially lifted to allow biological thinning to occur, as described above. Livestock closures will be coordinated with individual permittees through cooperative agreements.

- **Juniper Hand Piling**

In a drainage immediately east of the fire perimeter and west of the community of Frenchglen there is an area (approximately 20 acres) that received a cut and leave juniper treatment in 2008. Due to the increased

² Objective was established in the 2012 Miller Homestead Post-Fire Recovery Plan for Emergency Stabilization and Burned Area Rehabilitation.

risk of large runoff events, these downed trees now pose a threat to the community of Frenchglen. In order to reduce the risk of these trees being moved into the community of Frenchglen, the downed trees in this area will be hand piled outside the major drainage channel. This will be done by the Burns Interagency Fire Zone in the fall/winter of 2012. The Miller Homestead Fire removed vegetation throughout most of the burn area, leaving large areas of only mineral soil. Without vegetation to help capture precipitation and slow water runoff, large runoff events are expected. Since these downed juniper trees are near the bottom of the drainage and less than 0.25 mile from the community of Frenchglen, they are at risk of being moved into the community, posing a risk to human safety. This action was previously documented in the Lavoy Tables Prescribed Fire CX OR-08-026-034.

A. Project Design Elements

Project Design Elements were developed to aid in meeting project goals and objectives. These features are nonexclusive and are subject to change based on site-specific terrain characteristics (topography and vegetation). Changes, additions or deletions will be made through coordination with appropriate BLM specialists and approved by the District Manager. The Industrial Fire Precaution Levels will be followed during construction, where appropriate.

- **Cultural Protection**

Approximately 40 known cultural heritage sites on BLM-managed land and an additional 12 sites on the Refuge (including a Civilian Conservation Corps camp) were burned during this fire, including both historic and prehistoric sites. The area has been utilized historically and prehistorically by Native Americans, as well as by numerous ranchers and homesteaders over the last 150 years. Since the fire removed covering vegetation, artifacts on the surface will be easy to see for several years post fire; therefore, there is a high risk of illegal surface collection and acts of vandalism. As perennial vegetation becomes established on the site, this risk will decrease. The Burns District BLM Law Enforcement Officer and USFWS law enforcement will increase patrol in the Miller Homestead Fire until vegetation becomes established enough to cover cultural heritage sites and the risk of surface collection or vandalism decreases.

Cultural resource inventories will be conducted on areas proposed for ground disturbing stabilization and rehabilitation treatments (new fence construction, drill seeding, etc.). These inventories will be conducted prior to implementation of the proposed ground disturbing stabilization and rehabilitation treatments in order to identify and avoid any cultural resources needing protective measures. Inventories will be in accordance with the State Protocol Agreement between the Oregon BLM and the

Oregon State Historic Preservation Office (SHPO). All cultural resources will be recorded on agency approved site forms and plotted on maps. Resources, except those previously determined *Not Eligible* by the agency and SHPO, will be flagged for avoidance during stabilization and rehabilitation activities. Flagged sites will be either hand seeded or seeded via All Terrain Vehicles during stabilization and rehabilitation activities. Flagging will be removed as soon as possible after stabilization and rehabilitation treatments to minimize the potential for looting and vandalism. New fence construction will avoid cultural sites.

- The risk of noxious weed introduction will be minimized by ensuring all equipment (including all machinery, 4-wheelers, and pickup trucks) is cleaned prior to entry to the sites, minimizing disturbance activities, and completing follow-up monitoring, to ensure no new noxious weed establishment occurs. Should noxious weeds be found, appropriate control treatments will be performed in conformance with the 1998 Burns District Noxious Weed Program Management EA/DR OR-020-98-05, subsequent decision or within the parameters of this decision. Herbicide use will conform to federally approved manufacturers' herbicide labels as well as the streamside, wetland, and riparian habitat herbicide restrictions. Appropriate mitigation measures contained in Table 2 of the Final Vegetation Management EIS and Environmental Report (ROD, October 2007), or its successor, will be utilized as a part of the project design. The Burns Paiute Tribal Council will be notified in advance of any herbicide spraying so individuals gathering roots in the area where the spraying had occurred will know that they should stay clear of the area. Herbicides will not be used on any special status plant populations.
- All proposed wire fences, constructed within 1.25 mile of a lek or known seasonal use area (i.e. spring exclosures), will include reflective clips on the wire to enhance visibility and reduce potential mortality from sage-grouse hitting the fence.
- Proposed fences will not be constructed within 0.6 mile of active sage-grouse leks or known seasonal use areas.
- Escape ramps will be repaired or installed in troughs to minimize accidental drowning by migratory birds and other wildlife.
- Fences will be constructed to BLM specifications.
- All seed will meet BLM standards for weeds, germination, and purity.

B. Adaptive Management and Flexibility

Adaptive management is a system of management practices based on clearly identified outcomes and monitoring to determine if management actions are meeting desired outcomes; and, if not, facilitating management changes that will best ensure outcomes are met. Adaptive management recognizes that knowledge about natural resource systems is sometimes uncertain and, in this context, adaptive management affords an opportunity for improved understanding. Knowing uncertainties exist in managing for sustainable ecosystems, some changes in management may be authorized based on the previous year's monitoring and current year's climatic conditions.

Rangeland monitoring is a key component of adaptive management. As monitoring indicates changes in management are needed to meet resource objectives, changes agreed upon by the IDT and approved by management will be implemented.

C. Monitoring

Monitoring the success of treatments will take place within the Miller Homestead Fire perimeter. Monitoring will be implemented in treatment areas to determine success of treatments and need for future treatments.

Monitoring for vegetation, including seedings and planting, will be implemented beginning in fall 2012 by establishing photo and study plots, and visually inspecting the area. At least one plot per vegetation treatment type will be established. Existing monitoring plots will be utilized when possible. The plots will be read and photos taken in the spring of 2013, 2014, and 2015. The vegetation treatments will continue to be monitored on a 5-10 year rotation with regular allotment monitoring. This monitoring will determine the success of seedings and plantings, the status of native plants, annual grasses, and weeds, and whether the soil surface is being protected. Existing plots, located outside of treatment areas, will be used as control plots, and will be monitored on the same schedule as the new monitoring plots. See Appendix A, Map 11 for estimated locations of new monitoring plots and Appendix D: Monitoring Protocol.

Monitoring for treatment needs (i.e. culvert/ditch cleanout, catchment basin cleanout, etc...) will occur on a semi-annual basis, and may include photographs. This monitoring will determine if treatments are necessary or not.

Monitoring for weeds will occur with EDRR. Small infestations will include immediate treatment.

Compliance monitoring will also be conducted for the livestock and wild horse closure.

COMMENTS RECEIVED

On August 6, 2012 the BLM hosted a field trip to the Miller Homestead Fire area. The field trip included representatives from the Oregon Natural Desert Association, The Nature Conservancy, Sierra Club, Oregon Department of Fish and Wildlife (ODFW), Eastern Oregon Agricultural Research Center, Oregon State University Extension Service, USFWS, and Malheur National Wildlife Refuge. Participants were provided with a general idea of what rehabilitation efforts the BLM will plan for, including seeding and possible seeding species. Discussion on the need for soil stabilization and rehabilitation in the area, and questions from participants occurred during the field trip. On August 23, 2012, these participants including Harney County Court were updated on the fire stabilization and rehabilitation efforts, including more specifics on emergency stabilization and rehabilitation efforts that were submitted in the ES&R for the Miller Homestead Fire. Participants were informed the ES&R plan does not constitute a decision, and that proposed treatments/actions will be analyzed, as needed in an EA. Contact information was provided if any members of the interested public had specific questions or comments. In addition Congressman Greg Walden's and Senator Merkley's aides were provided information regarding fire rehabilitation efforts.

In addition to the field trip, affected permittees have been met with on an individual basis and are ongoing. Discussion with other governmental agencies, including Refuge, ODFW, USFWS, and the Burns Paiute Tribe are also ongoing.

RATIONALE

I have selected Alternative B: Proposed Action – Full Implementation of the Miller Homestead Fire ES&R Plan based on the following:

This Decision best meets the Purpose and Need for the action because it provides the greatest likelihood of successful establishment of perennial vegetation ground cover to 1) compete with cheatgrass for available site resources to reduce the likelihood of burned areas converting to invasive annual grass dominance; 2) stabilize soils after the first growing season and reduce potential for accelerated soil erosion associated with invasive annual communities; 3) reduce the fire return interval associated with invasive annual grass dominance; 4) coexist with and promote reestablishment of native vegetation; 5) result in less time needed for Wyoming big sagebrush to reach sufficient cover percentages to begin to provide usable habitat for sage grouse as both hiding/nesting cover and as a critical food source during the winter season, and 6) reduce the likelihood of new weed establishment or expansion of existing weed infestations. In addition it provides for the ability to control erosion, protect facilities, and provide for public safety.

When an area is not grazed following a fire, or when grazing is occurring at low levels, fine fuels accumulate, putting an area at risk for a large-scale, high-intensity wildfire. Biological thinning will be authorized in areas where total utilization of above ground biomass of fine fuels is less than 40 percent after seed set when grasses become dormant, putting the site at substantial risk of wildfire. Biological thinning may also be authorized

in areas that become infested with annual grasses. In areas that do not receive grazing, the amount of fine fuels that accumulate is greater than on grazed rangelands; the more fine fuels, the larger the risk of wildfire (Davies et al. 2010). Research has shown that fine fuel accumulation as a product of grass production is positively correlated to an increase in fire occurrence and is an important component of fire spread (Miller and Urban 2000), and the reduction of these fuels is important in suppressing fire spread (Blackmore and Vitousek 2000). Livestock grazing removes fine fuels from communities; therefore, when it is properly managed at moderate levels, it can decrease the risk of wildfires, as well as wildfire intensity and size, by decreasing the continuity of fine fuels, resulting in a decreased risk of annual grass invasion post-fire.

Using forage kochia in the seed mix will improve the likelihood of successful establishment of a desirable plant species that can stabilize the soils and compete with invasive annuals and noxious weeds to help reduce the risk of increased fire frequency (Harrison et al. 2002). By helping break up the fuel source and reduce fire frequency, forage kochia as well as crested wheatgrass will facilitate the return of native plant communities, which is at higher risk of not occurring in these areas without management intervention. If the seeding is successful, the sub-shrub growth form of forage kochia will provide additional structure for smaller wildlife (sage-grouse and pygmy rabbit included) to use as cover, especially in the first few years after the fire when grasses and forbs are the primary vegetative component. Desirable non-native species, such as forage kochia and crested wheatgrass, aid in vegetative restoration, soil stabilization, diversification, wildlife habitat restoration, and long-term suppression of invasive species in degraded Wyoming big sagebrush ecological sites (Monaco et al. 2003; Clements et al. 1997; Davies et al. 2010; Davies et al. in press).

Without the maintenance of existing fences damaged by the fire, management of livestock in specific pastures will be impossible, as will accomplishing the rest period following fire allowing vegetation to recover.

Sagebrush is a critical habitat component for sage-grouse and pygmy rabbits, especially in the winter when sagebrush constitutes more than 90 percent of their diet (Hagen 2011, Weiss and Verts 1984). Temporary fences will provide for long-term benefit to sage-grouse by allowing the establishment of high quality, forb enriched, sagebrush habitat in the future by eliminating grazing by wild horses and livestock until objectives are met. Without these fences the areas are expected to result in grazing of plants attempting to recolonize an area denuded by fire. These fences will also lessen the chance the fire area will be invaded by cheat grass, as it will allow the seeded vegetation to establish and grow without the pressure of grazing.

All fences will be outside of the 0.6 mile distance from leks to reduce collision hazards to flying birds (sage-grouse) contained in the conservation guidelines in the Oregon Sage-Grouse Conservation Strategy (Hagen 2011). The fences will be marked with anti-strike markers as directed in the sage-grouse instruction memorandum (IM 2012-043). With these measures taken, fence-marking efforts can reduce collisions by up to 83 percent in high risk landscapes (Stevens et al. all, 2010).

Establishing desirable vegetation also enhances the burned area's resistance to noxious weeds. However, where herbicide treatments are necessary, using the new approved products, either alone or in combination with currently available products, provides the best tools available to ensure effective, timely management of noxious weeds in this area. By controlling noxious weeds, the potential for success of rehabilitation of the project area following the disturbances from the Miller Homestead wildfire will be enhanced.

In addition, applying a ground sterilant around power poles and communication facilities' flammable structures will protect these facilities against damage if threatened by future fires.

I did not select the No Action Alternative because it takes no action to control the establishment and spread of noxious weeds in areas of the fire not expected to recover naturally, nor will it allow for treating noxious weeds with the most effective herbicides within existing weed infestations adjacent to the fire. Without treatment of invasive annuals (cheatgrass) utilizing herbicides and biological thinning, the invasive species may become dominant on the site. If the burned area is not treated and managed to prevent weedy species from becoming dominant in the area, range condition and ecological processes will decline while erosion and soil loss increases, making it less likely the site will recover from the burn naturally. In addition, the increase in annual species will increase the amount of fine fuels present on the site. This will increase the fire return interval, making wildfires more common, and decreasing the ability of desirable species to recover.

ADMINISTRATIVE REMEDIES

Authority

Authority for this decision is found under 43 Code of Federal Regulations (CFR) 4190.1 Effect of wildfire management decision. "(a) Notwithstanding the provisions of 43 CFR 4.21(a)(1), when BLM determines that vegetation, soil or other resources on the public lands are at substantial risk of wildfire due to drought, fuels buildup, or other reasons, or at immediate risk of erosion or other damage due to wildfire, BLM may make a rangeland wildfire management decision effective immediately... Wildfire management includes but is not limited to: (1) Fuel reduction or fuel treatment such as ...biological thinning methods...; and (2) projects to stabilize and rehabilitate lands affected by wildfire." Under these regulations, biological thinning will be allowed to occur within the affected allotments in order to biologically thin (by removal) fine fuels and reduce the risk of wildfire and conduct projects to stabilize and rehabilitate lands such as seeding, planting, erosion control, road maintenance/protection, and fence maintenance/construction.

Authority for the wild horse decision is found in the Wild Horse and Burro Act of 1971 (PL 92-195) as amended and Title 43 CFR Part 4700 including 43 CFR 4720.1, 43 CFR 4740 .1, 43 CFR 4710.3-1, and 4710.4. The authority to provide that all or part of a decision be effective upon issuance is found in 43 CFR 4770.3 (c). The effective date is the date of the authorized officer's signature.

The administrative authorized for application of chemicals falls under the following appeal procedures.

Appeal Procedures

This decision may be appealed to the Interior Board of Land Appeals (IBLA), Office of the Secretary, in accordance with regulations contained in 43 CFR, Part 4 and Form 1842-1. If an appeal is filed, your notice of appeal should be received by the Burns District Office, 28910 Highway 20 West, Hines, Oregon 97738, within 30 days of receipt of the decision. The appellant has the burden of showing the decision appealed is in error.

A copy of the appeal, statement of reasons, and all other supporting documents should also be sent to the Regional Solicitor, Pacific Northwest Region, U.S. Department of the Interior, 805 SW Broadway, Portland, Oregon 97205. If the notice of appeal did not include a statement of reasons for the appeal, it must be sent to the Interior Board of Land Appeals, Office of Hearings and Appeals, 801 North Quincy Street, Arlington, Virginia 22203. It is suggested appeals be sent certified mail, return receipt requested.

Request for Stay

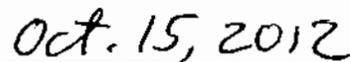
Should you wish to file a motion for stay pending the outcome of an appeal of this decision, you must show sufficient justification based on the following standards under 43 CFR 4.21:

- The relative harm to the parties if the stay is granted or denied.
- The likelihood of the appellant's success on the merits.
- The likelihood of immediate and irreparable harm if the stay is not granted.
- Whether or not the public interest favors granting the stay.

As noted above, the motion for stay must be filed in the office of the authorized officer.



Brendan Cain
Burns District Manager



Date

UNITED STATES
DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Burns District Office
Finding of No Significant Impact

Miller Homestead Fire Emergency Stabilization and Rehabilitation Plans
Environmental Assessment
DOI-BLM-OR-B060-2012-0047-EA

INTRODUCTION

The Burns District Bureau of Land Management (BLM) has prepared an Environmental Assessment (EA) proposing to implement Emergency Stabilization and Burned Area Rehabilitation (ES&R) Plan on the Miller Homestead fire located on BLM administered lands managed by the BLM Burns District Office, as well as portions of the Malheur National Wildlife Refuge (further referred to as Refuge) managed by the United States Fish and Wildlife Service (USFWS), and privately owned land.

The Miller Homestead Fire (Fire Number G1G1) was ignited by lightning associated with dry thunderstorms on July 8, 2012 and was contained on July 24, 2012. The fire burned a total of 160,801 acres, comprising 146,798 acres of BLM-managed land, 1,209 acres of Refuge, and 12,794 acres of private land. The wildfire started approximately 12 miles west of Frenchglen, Oregon, and began burning in grass and brush on BLM administered land.

SUMMARY OF THE PROPOSED ACTION

The Proposed Action is to implement the ES&R plan for the Miller Homestead Fire, and apply select herbicides to noxious weeds within a project area encompassing the fire perimeter. Stabilization and rehabilitation treatments proposed under this project include applying herbicides (Imazapic, Chlorsulfuron, Clopyralid) to noxious weeds in particular cheatgrass within a treatment area encompassing 23,300 acres, sagebrush seedling (plugs) planting on 9,082 acres, drill seed 22,000 acres, aerially seed (various mixtures) on 3,500 acres within the Miller Homestead fire perimeter, livestock grazing closures on burned portions of the fire, and monitoring burned areas for noxious weeds and effectiveness of rehabilitation treatments.

While burned areas are not grazed, fine fuels accumulate. The accumulation of these fuels puts the area at risk for another high-intensity wildfire. In addition, grasses often show increased production following wildfire due to the reduced competition and nutrient cycling that occurs from fire events. As noted in 43 CFR 4190.1 Effect of wildfire management decision. “(a) Notwithstanding the provisions of 43 CFR 4.21(a)(1), when BLM determines that vegetation, soil or other resources on the public lands are at substantial risk of wildfire due to drought, fuels buildup, or other reasons, or at immediate risk of erosion or other damage due to wildfire, BLM may make a rangeland wildfire management decision effective immediately...” “Wildfire management includes but is not limited to: (1) Fuel reduction or fuel treatment such as...biological thinning methods...; and (2) projects to stabilize and rehabilitate lands affected by

wildfire.” Under these regulations, use by livestock would be allowed to occur within the affected allotments in order to remove fine fuels and reduce the risk of wildfire. Biological thinning would be allowed using a cooperative agreement, outlining the terms and conditions mentioned in this document, as well as any other terms and conditions that may be needed depending on the specific site. The specific area where biological thinning is to occur would be identified on a map and included in cooperative agreements. Supplements and water would be allowed to be placed in these areas to help manage the movement of livestock while meeting their nutrient requirements. Any use occurring outside of the treatment area may be subject to trespass actions. If trespass actions are carried out, that operator would no longer be authorized to participate in biological thinning treatments. If at any point the cooperative agreement is violated, biological thinning would immediately cease and that operator would no longer be authorized to participate in biological thinning treatments. Biological thinning permitting would occur under 43 CFR 4130.5(b)(1) which allows the authorized officer to authorize free use when the primary objective is “the management of vegetation to meet resource objectives...”.

FINDING OF NO SIGNIFICANT IMPACT

Consideration of the Council on Environmental Quality (CEQ) criteria for significance (40 CFR 1508.27), both with regard to context and intensity of impacts, is described below:

Context

The Proposed Action would occur in the Three Rivers/Andrews Resource area and would have local impacts on affected interests, lands, and resources similar to and within the scope of those described and considered in the Three Rivers Proposed Resource Management Plan/Final Environmental Impact Statement (PRMP/FEIS), the Andrews Management Unit/Steens Mountain Cooperative Management and Protection Area (AMU/CMPA) PRMP/FEIS, and the 2010 Vegetation Treatments Using Herbicides on BLM Lands in Oregon FEIS. There would be no substantial broad societal or regional impacts not previously considered in these planning documents.

Intensity

The CEQ's ten considerations for evaluating intensity (severity of effect):

1. *Impacts that may be both beneficial and adverse.* The EA considered potential beneficial and adverse effects. Project Design Features were incorporated to reduce or eliminate impacts. None of the effects are beyond the range of effects analyzed in the planning documents cited above.

Soils/Biological Soil Crusts (BSCs): Forage kochia out-competes cheatgrass, allowing native vegetation time to reestablish, grow, and decrease bare ground. This species, if establishment is successful, would help stabilize soils and prevent erosion, while at the same time provide an interspace habitat for BSCs to reestablish and grow, however at a slow rate (years to decades). Studies have shown that reseeding after a fire, while causing disturbance to the BSCs which did not burn in the fire, helps prevent further loss

and degradation. While there is no evidence that Plateau could cause an initial decrease or loss to BSCs, the potential for reestablishment is possible due to the suppression and/or eradication of cheatgrass and other invasive annual grasses. There is a greater threat for a complete loss of BSCs from not treating cheatgrass and allowing it to colonize the interspace habitat of BSCs.

Overall, while there might be impacts to soils and BSCs, the long term benefits of eradicating cheatgrass outweigh those impacts. Without these invasive annual grasses, soils and BSCs would have an opportunity to stabilize, regrow and reestablish, providing valuable nutrient cycling and water capture functions.

Grazing Management and Wild Horses: Seeded and naturally recovering areas would recover to desired perennial vegetation, subsequently maintaining or improving available forage for livestock and wild horses. Aerial seeding, aerial herbicide application, and aerial weed monitoring could temporarily disturb horses due to the presence of aircraft within and adjacent to the Herd Management Area boundary, however these impacts would be temporary (minutes as the helicopter passes over) and would not result in long-term displacement from their habitat. Cattle would be removed until vegetative objectives have been met.

Migratory Birds: Potential noise and visual disturbance associated with aerial seeding or aerial application of herbicides may cause temporary displacement or alter the activity level or behavior of some birds. However, treatments would occur at a time of year when most birds have migrated out of the area, and birds that remain are mobile and able to leave the immediate area. Disturbance effects would primarily be limited to the treated areas, where planes or helicopters would be flying closest to the ground. Disturbance effects from aerial seeding and spraying would be un-measurable on migratory bird populations due the brief (few hours) amount of time required to spread the seed or apply the herbicide. Most migratory birds would return to the area or resume activity once seeding or spraying is complete.

Use of biological thinning would help to control any blooms of invasive species such as cheatgrass, and allow for the recruitment of shrubs and sagebrush; reducing the risk of future large scale wildfires, resulting in useable sage brush habitat for sage brush obligate species of migratory birds.

Noxious Weeds: Establishing desirable vegetation would enhance the burned area's resistance to noxious weeds. Effective use of the clean equipment Project Design Element would minimize the potential for project introduction of additional noxious and invasive weeds. A weed resistant, desirable plant community would contribute towards soil stability and upland community functionality. Where herbicide treatments are necessary, using these new products, either alone or in combination with currently available products, would provide the best tools available to ensure effective, timely management of noxious weeds in this area. By controlling noxious weeds, the potential for success of rehabilitation of the project area following the disturbances from the Miller Homestead wildfire would be enhanced.

Special Status Species: Sage-grouse: Noise and visual disturbance associated with aerial seeding or aerial application of herbicides may cause temporary displacement or alter the activity level or behavior of some birds. Potential disturbance effects of aerial seeding would not be measurable on sage-grouse individuals and populations due to the relatively brief (few hours) amount of time required to carry out treatments. Potential disturbance effects of drill seeding would be undetectable due to the intensity of the fire removing useable habitat; sage grouse are not expected to be in the area during the seeding activities.

Using forage kochia associated with the emergency stabilization Miller Homestead Fire seed mixes that include native and desirable non-native plant species would improve the likelihood of successful establishment of a desirable plant species that can stabilize the soils and compete with invasive annuals and noxious weeds to help reduce the risk of increased fire frequency (Harrison et al. 2002). By helping break up the fuel source and reduce fire frequency, forage kochia would facilitate the return of sagebrush plant communities, which is not expected to occur in these areas without management intervention. Although forage kochia remains high in protein throughout the year, its value for sage-grouse forage is unknown. However, the sub-shrub growth form of forage kochia would provide additional structure for sage-grouse cover, especially in the first few years after the fire when grasses and forbs are the primary vegetative component.

Fence, gate, and cattle guard maintenance and reconstruction would occur as needed to exclude livestock and wild horses from the burned area until objectives are met. Protection from livestock and wild horse grazing would help to allow for faster recovery of affected vegetative communities, providing sage brush habitat for sage-grouse and pygmy rabbit. Fences create a collision hazard to sage-grouse, but marking fences as proposed with reflective devices and avoiding construction within 0.6 miles is expected to alleviate much of the potential for this to occur.

Use of biological thinning would help to control any blooms of invasive species such as cheatgrass, and allow for the recruitment of shrubs and sagebrush; reducing the risk of future large scale wildfires, resulting in useable sage brush habitat for sage-grouse and pygmy rabbit.

Application of the proposed herbicides using Standard Operating Procedures (Appendix E) would not only improve the success of the seeding effort, it would help protect native plants that survived the fire. These native plants, especially sagebrush, provide a valuable seed source adapted to the local environment, which further reduces the time needed for the native plant community to recover (Leger 2008). The seedling planting would jumpstart the recovery of sagebrush because it typically has a higher survival rate than seeded sagebrush and decreases the period required to achieve reproductive maturity, resulting in less time needed for Wyoming big sagebrush to reach sufficient cover percentages to begin to provide usable habitat. Implementation of this alternative would result in maintenance or improvement of more acres of sage-grouse habitat compared to the No Action Alternative.

Upland Vegetation: This project was designed to establish a ground cover of desired perennial vegetation in those plant communities not expected to recover naturally within both fires. Successful seeding of the Proposed Action would further decrease the potential transition to an annual grass dominated community, introduce a longer green period through the growing season, and provide more habitat values than an exotic annual grass community. In comparison to a cheatgrass dominated community, establishment of native and desirable non-native plant species would set the stage to a faster successional trajectory towards a native plant community.

Biological thinning is intended to reduce fine fuels, including annual grasses such as cheatgrass. Biological thinning of cheatgrass prior to native and desirable non-native vegetation meeting objectives would reduce competition from cheatgrass by removing the seed source by preventing germination and spread. Because the thinning would take place following recommendations in the “Green and Brown” guide, impacts to natives and desirable non-natives would be minimal. Reduction in competition from invasive species opens up previously occupied habitats allowing seeded species as well as seed stored in the soil to germinate and establish.

Treating noxious weeds with additional herbicides would benefit upland vegetation by allowing the most effective chemical weed treatments in areas of vegetative disturbance. Treating noxious weeds in these areas would promote and maintain the abundance of native and desired introduced vegetation. These herbicides have been shown to selectively treat cheatgrass and medusahead rye leaving desirable perennial vegetation unharmed (Davies and Sheley 2011).

Wildlife: Potential noise and visual disturbance associated with ground seeding, aerial seeding or aerial application of herbicides may cause temporary displacement of some larger wildlife species, such as Rocky Mountain elk, or alter the activity level or behavior of animals in the area. Effects would primarily be limited to the treated areas, where tractors and drills would be in use, or planes or helicopters would be flying closest to the ground. Overall, disturbance effects from aerial seeding and spraying would be undetectable on wildlife populations due to the brief (few hours) amount of time required to spread the seed or apply the herbicide. Most of the affected animals would return to the area or resume activity once seeding or spraying is complete.

Fence, gate, and cattle guard maintenance and reconstruction would occur as needed to exclude livestock from the burned area until vegetation objectives are met. There is the potential for fences to create a collision hazard to wildlife, but most wildlife species either jump over or go under the fences. Protection from livestock grazing would help to allow for recovery of affected vegetative communities, providing nutrient rich, native sources of feed for wildlife species.

Biological thinning is the reduction of fine fuels by the removal by livestock. Use of this method would help to control any blooms of invasive species such as cheatgrass, and allow for the recruitment of shrubs and sagebrush; reducing the risk of future large scale

wildfires, resulting in useable sagebrush habitat, while maintaining feed for wildlife species.

Applying forage kochia seed would improve the likelihood of successful establishment of a desirable plant species that can compete with invasive annuals and noxious weeds and help reduce the risk of increased fire frequency (Harrison et al. 2002). By helping break up the fuel source and reduce fire frequency, forage kochia would facilitate the return of native grasses and shrubs, which is not expected to occur in these areas without management intervention. Forage kochia is high in protein throughout the year, and has been successfully used to stabilize and improve mule deer winter range in Nevada (Clements et al. 1997). If the seeding is successful, the sub-shrub growth form of forage kochia would provide additional structure for wildlife cover, especially in the first few years after the fire.

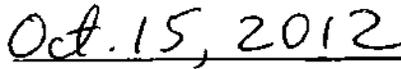
2. *Degree to which the Proposed Action affects public health and safety.* No aspect of the Proposed Action or alternatives would have an effect on public health and safety beyond those analyzed in the 2010 Vegetation Treatments Using Herbicides on BLM Lands in Oregon FEIS (page 100-101, 348-350, 353).
3. *Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.* The Miller Homestead fire burned next to and inside the Refuge. Some inclusions of the Refuge on the west side of highway 205 are included in aerial and drill seeding areas, the effects are the same as the overall areas to be seeded. No other unique characteristics are known to exist within the proposed Project Area.
4. *The degree to which effects on the quality of the human environment are likely to be highly controversial.* Controversy in this context means disagreement about the nature of the effects, not expressions of opposition to the Proposed Action or preference among the alternative. No unique or appreciable scientific controversy has been identified regarding the effects of the Proposed Action or alternatives beyond those analyzed in the 2010 Vegetation Treatments Using Herbicides on BLM Lands in Oregon FEIS.
5. *Degree to which possible effects on the human environment are highly uncertain or involve unique or unknown risks.* The analysis has not shown there would be any unique or unknown risks to the human environment nor were any identified in Three Rivers, Andrews Management Unit Resource Management Plans (RMP)s/Record of Decisions (ROD)s, The Vegetation Treatments Using Herbicides on BLM Lands in Oregon FEIS analyzed the use effects of the proposed chemicals and associated risks.
6. *Degree to which the action may establish a precedent for future actions with significant impacts or represents a decision in principle about a future consideration.* This project neither establishes a precedent nor represents a decision in principle about future actions. No long-term commitment of resources causing significant impacts was noted in the EA or FEISs.

7. *Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.* The environmental analysis did not reveal any cumulative effects beyond those analyzed in the afore mentioned environmental documents. The EA described the current state of the environment (Affected Environment by Resource, Chapter III) which included the effects of past actions, and included analysis of reasonably foreseeable future actions identified in the project area.
8. *Degree to which the action may adversely affect districts, sites, highways, structures or objects listed in or eligible for listing in the National Register of Historic Places.* There are no known features within the Project Area listed or eligible for listing in the *National Register of Historic Places*.
9. *The degree to which the action may adversely affect an endangered or threatened species or its habitat.* There are no known threatened or endangered species or their habitat affected by the Proposed Action or alternatives.
10. *Whether an action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.* The Proposed Action does not threaten to violate any law. The Proposed Action is in compliance with the Three Rivers, Andrews Management Unit RMPs/RODs, which provide direction for the protection of the environment on public lands.

On the basis of the information contained in the EA and all other information available to me, it is my determination that:

1. The implementation of the Proposed Action or alternatives will not have significant environmental impacts beyond those already addressed in the Three Rivers PRMP/FEIS (September 1991); AMU/ CMPA PRMP/FEIS (2004), and the Vegetation Treatments Using Herbicides on BLM Lands in Oregon FEIS (2010);
2. The Proposed Action and alternatives are in conformance with the Three Rivers ROD (September 1992); Andrew Management Unit RMP/ROD (2005), and the Vegetation Treatments Using Herbicides on BLM Lands in Oregon ROD (2010);
3. There would be no adverse societal or regional impacts and no adverse impacts to affected interests; and
4. The environmental effects, together with the proposed Project Design Features, against the tests of significance found at 40 CFR 1508.27 do not constitute a major Federal action having a significant effect on the human environment.


 Brendan Cain
 Burns District Manager


 Date