BLM OREGON POST-FIRE RECOVERY PLAN

EMERGENCY STABILIZATION AND BURNED AREA REHABILITATION

PLAN TEMPLATE 2010

LONG DRAW FIRE (G1HG)

BLM Vale District Office

OREGON STATE OFFICE

FIRE BACKGROUND INFORMATION

Fire Name	Long Draw
Fire Number	G1HG
District/Field Office	Vale District Office
Admin Number	LLORV00000
State	OREGON
County(s)	MALHEUR
Ignition Date/Cause	07/08/2012 Lightning
Date Contained	07/15/2012
Jurisdiction	*Acres*
Other	1865
State	218
Private	7734
BLM	548379
Total Acres	558196
Total Costs	$24,938,000
Costs to LF20000ES (2822)	$18,197,000
Costs to LF32000BR (2881)	$6,741,000

Status of Plan Submission (check one box below)

	Initial Submission of Complete Plan
X	Updating or Revising the Initial Submission
	Amendment

PART 1 - PLAN SUMMARY

BACKGROUND INFORMATION ON FIRE.

On July 8, 2012 at approximately 1800 hours lightning ignited the Long Draw fire in T. 37 S, R. 41 E, Sec. 3. The Long Draw fire grew rapidly as multiple storm cells passed over the fire; just after midnight on July 9th it was apparent that the fire was no

longer a Type III Incident. Overnight the Long Draw fire had grown to approximately 29,000 acres and a Type II Incident Management Team was requested by 0700 hours the following morning. The fire continued to grow rapidly due to erratic winds, (direction and speed) abnormally high temperatures and multiple storm cells passing through the area. Extreme fire behavior was observed midafternoon on July 9th when the Long Draw fire jumped to the east side of U.S. Highway 95 just north of Basque Station, Oregon. The Type II Team took over management of the fire the morning of July 10th. Extreme fire behavior continued through July 10th. A Type I Incident Management Team was requested on July 10th and took over management of the fire on July 12th. The Long Draw fire was contained on July 15, 2012 after burning a total of 558,198 acres of the Jordan Resource Area, Vale District BLM. A Type III Incident Management Team assumed control of the fire on July 17th and the fire was returned to local control on July 20th. The fire was called controlled on July 30th.

The Long Draw fire burned 548,379 acres of public land administered by the BLM; 7,735 acres of private land, 1,866 acres of Department of Energy Land and 218 acres of state land. The Vale District BLM Office has Geographic Information Systems (GIS) fire history dating back to 1980. Prior to the Long Draw fire, the largest recorded fire within the area south of Rome, Oregon and east of U.S. Highway 95 was the Jackies Butte fire which burned in 2001. The Jackies Butte fire of 2001 burned 67,050 acres, prior to this the largest fire was the Indian Fort fire which occurred in 1983 and burned 53,858 acres. Of the 558,198 acres burned in the Long Draw fire, fire records dating back to 1980 show that 448,508 acres of this fire (80%) have never burned.

The area burned by the Long Draw fire is described as a sagebrush steppe. Approximately, sixty percent of the burned area is within the Owyhee Upland Province and the remaining forty percent is within either the Northern Basin or Range Province. Two major vegetative types dominate the lower elevation desert upland plant communities. The first is typified by big sagebrush and bluebunch wheatgrass where dominance of sagebrush varied pre-burn, the variation was dependent on fire frequency among other various factors. The presence of other species varied based on various factors primarily elevation, soil type and rainfall. Sandberg bluegrass and bottlebrush squirreltail were found in areas which received low amounts of precipitation. Minor herbaceous species included Thurber’s needlegrass, and indian rice grass. In areas of shallow soils, low and black sagebrush were present. Idaho fescue and bluebunch wheatgrass were co-dominant at higher elevations. The second vegetative type is composed primarily of shrubs, on alkaline soil and was dominated by shadscale saltbrush and other shrubs, including spiny hopsage, and greasewood. It is

common to find this type of vegetation growing as a complex in

association with Wyoming big sagebrush. Lower elevations within the burn have been determined to be susceptible to cheatgrass invasion following disturbances.

The Long Draw fire burned 16,174 acres of the Alvord Desert Wilderness Study Area; 58,953 acres of the Bowden Hills Wilderness Study Area; 31,258 acres of the Owyhee River Canyon Wilderness Study Area; 206,483 acres of lands found to contain wilderness characteristics; 16,343 acres (3%) of the Coyote Lake-Alvord-Tule Springs Wild Horse Herd Management Area; 47,829 acres (73%) of the Jackies Butte Wild Horse Herd Management Area; 225,959 acres of sage-grouse Preliminary Priority Habitat (PPH); 224,687 acres of sage-grouse Preliminary General Habitat (PGH). The eastern edge of the Long Draw fire was primarily the Owyhee and West Little Owyhee Rivers both of which are designated under the Wild and Scenic Rivers Act. The Long Draw fire burned 1,904 acres of the West Little Owyhee River Corridor; 998 acres of the Owyhee River Corridor. 136 acres (92%) of the Mendi Gore Playa Area of Critical Environmental Concern (ACEC)/Research Natural Area (RNA) were burned. The Mendi Gore Playa ACEC/RNA hosts a winterfat community and is a small area representing a black sagebrush community valued as one of the vegetation cells identified by Oregon Biodiversity Information Center (ORBIC).

The southeastern 2/3 of the burned area (about 60% of the total burned area) receives 10 to 12 inches of precipitation annually and consists mainly of Wyoming Big Sagebrush/Bluebunch Wheatgrass ecological types (Loamy 8-11 025XY010OR, Shallow Claypan 11-13 025XY016OR) or Wyoming Big Sagebrush/Thurbers Needlegrass - Bluebunch Wheatgrass ecological types (Loamy 10-12 024XY212OR). The northwestern portion of the burned area receives 8 to10 inches of annual precipitation and contains less productive Wyoming Big Sagebrush/Thurbers Needlegrass - Bluebunch Wheatgrass ecological types (Loamy 8-10 024XY016OR), Black sage/Thurbers Needlegrass - Bluebunch Wheatgrass ecological types (South Slopes 8-10 (023XY638OR, Thin North 024XY655OR, and Thin Surface 8-13 024XY021OR) as well as salt desert shrub communities of Shadscale/Budsage ecological type (Desert Loam 6-10). Sandberg Bluegrass and bottlebrush squirreltail, both native grasses and cheatgrass, a non-native invasive annual grass, are all ubiquitous throughout the burned area.

The applicable land use plan for the ES&BAR proposed treatment area is the Southeastern Oregon Resource Management Plan Record of Decision (SEORMP/ROD) September 2002.

The treatments outlined in this plan are also consistent with the treatments analyzed in the Vale District Normal Fire Emergency Stabilization and Rehabilitation Plan (NFESRP) Environmental Assessment (EA# OR-030-2005-05) prepared by the Vale District Office, with the exception of three proposals. Projects within Wilderness Character Units, construction of snow fences, and application of Imazapic herbicide to control annual grasses will require NEPA analysis separate from the NFESRP. The snow fences and projects within Wilderness Character Units would have NEPA analysis completed in a relatively short timeframe. The NEPA for the use of Imazapic would need to be completed by 3rd quarter of FY 13.

All treatments identified in this plan have been reviewed and are in conformance with the Southeastern Oregon Resource Management Plan (SEORMP) as detailed in the Documentation of Land Use Plan Conformance and NEPA Adequacy (DNA) number V060-2012-037 prepared for this plan, with the exception of projects that are proposed

within Wilderness Character Units. The current Land use Plan for Southeastern Oregon does not include an analysis of wilderness character. The Vale District is currently in the process of amending the SEORMP to include this analysis per the settlement agreement between Oregon Natural Desert Association and the Bureau of Land Management Docket No. 05-35931. The settlement agreement states that "Until the BLM has completed an RMP amendment, if a project is proposed or scheduled for implementation…in an area that BLM has found to possess wilderness character, the BLM will analyze the effects on wilderness character through each project's NEPA process" (Settlement Agreement pg 3).

LAND USE PLAN CONSISTENCY

S2 - Ground Seeding

Grass Seeding:
Objective 1 for rangeland vegetation on page 38 of the Southeastern Oregon Resource Management Plan (SEORMP) states: Restore, protect, and enhance the diversity and distribution of desirable vegetation communities including perennial native and desirable introduced plant species. Provide for their continued existence and normal function in nutrient, water, and energy cycles.

S3 - Aerial Seeding

Management of big sagebrush cover in seedings and on native rangeland to meet the life history requirements of sagebrush-dependent wildlife is described on page 40 of the Southeastern Oregon Resource Management Plan (SEORMP). Managing shrub overstory for multiple-use has significant benefits for wildlife. The character of upland vegetation influences wildlife habitat quality and productivity. This treatment is further provided for on page 50 under the wildlife and wildlife habitat objectives.

S5 - Noxious Weeds

Noxious weed treatments would be consistent with the guidelines set forth in the ESR

handbook (1742-1, pages 34 – 35), the Southeastern Oregon Resource Management Plan and Record of Decision 2002, the Vale District Integrated Weed Control Plan EA (1989), the Northwest Area Noxious Weed Control Program EIS 1984, and Supplement, 1987 and the Standard Operating Procedures and Mitigation Measures identified in the Vegetation Treatments Using Herbicides on BLM Lands in Oregon FEIS and ROD (2010). Pesticide Use Proposals (plans) would be prepared for weed treatments and comply with policy (BLM Manual 9011, H-9011, and 9015).

S6 - Soil Stabilization (Other than seedling, planting)

Soil Stabilizations

Addressing public safety and potential property damage is specifically identified in the SEORMP. Minimizing risk to traffic along U.S. Hwy 95due to the expected dust and snow storms are expressly consistent with the SEORMP regarding public health and safety

S7 - Fence/Gate/Cattleguard
Treatments have been reviewed and are in conformance with the Southeastern Oregon Resource Management Plan (2002).

S9 - Cultural Protection (Stabilization/Patrol)
Conducting assessments of known cultural resources in the boundary of the fire, stabilizing with low impact seeding and erosion control measures, and patrolling fire effected known sites is consistent with the Southeastern Oregon RMP. The objective for cultural resources is to “protect cultural values in the resource area from accidental or intentional loss”.

S11 - Facilities
Public Information/Hazardous Routes Signs:

Treatments have been reviewed and are in conformance with the Southeastern Oregon Resource Management Plan (2002).

US Highway 95 - Culvert protection, snow fence reconstruction, and new debris/snow catch fences.

Treatments targeting protection of life and property concerns on public lands – in coordination with other local, State and Federal agencies is identified as a priority in the SEORMP. The Oregon Department of Transportation has coordinated with BLM to develop a plan for re-establishing hazard reduction along the burned stretch of Hwy 95 that was burned, or for infrastructure that could be impacted by high wind or high runoff events. Newly proposed additional dust, debris and/or snow fences may require additional NEPA.

S12 - Closures (area, OHV, livestock)
Grazing:

Closure to livestock grazing is specifically provided for on page 40 of the Southern Oregon Resource Management Plan (SEORMP). The burned area will be rested for one full year and through a second growing season at a minimum, or until monitoring data or professional judgment indicate that health and vigor of desired vegetation has recovered to levels

judgment indicate that health and vigor of desired vegetation has recovered to levels adequate to support and protect upland function. Within Priority Sage Grouse Habitat, grazing should only be resumed when it does not impede recovery of sage grouse habitat.

Herd Management Area Closures:

Gathering Wild Horses is in conformance with the Southeastern Oregon Resource Management Plan (2002).

Recreation (OHV):

In all VRM Class 1 areas within the burned area, OHV use is already limited to designated routes. Emergency closures are specifically provided for on page 65 of the Southern Oregon Resource Management Plan (SEORMP), emergency OHV closures to travel off existing roads/routes or use limits may be implemented as necessary to protect natural and cultural resources, reduce or eliminate user conflicts, or protect the public from hazard areas.

S13 - Monitoring
Monitoring of projects is consistent with direction in the Southeastern Oregon RMP as well as the Vale District Normal Year ESR Plan.

R4 - Seedling Planting
Sagebrush Seedling Planting and Sagebrush Seed Scatter:
Management of the big sagebrush cover in seedings and on native rangeland to meet the life history requirements of sagebrush-dependent wildlife is described on page 40 of the Southeastern Oregon Resource Management Plan (SEORMP). Managing shrub overstory for multiple-use has significant benefits for wildlife. The character of upland vegetation influences wildlife habitat quality and productivity. This treatment is further provided for on page 50 under the wildlife and wildlife habitat objectives.

R5 - Noxious Weeds
The proposed herbicide treatment is in conformance with the Southeastern Oregon Resource Management Plan and Record of Decision September 2002:

“The distribution and density of noxious weeds will be reduced through the application of approved control methods…Control methods will include preventative management to maintain competitive vegetation cover and reduce the distribution and introduction of noxious weed seed…and application of chemicals. Target species will include those identified by county, state, and BLM weed priority lists”. Pg 41 RMP.

The ground based and aerial application of Imazapic on rangeland is in conformance with the Vegetation Treatments Using Herbicides on BLM Lands in Oregon FEIS and ROD (2010).

R7 - Fence/Gate/Cattleguard
Treatments have been reviewed and are in conformance with the Southeastern Oregon

Treatments have been reviewed and are in conformance with the Southeastern Oregon Resource Management Plan (2002).

R11 - Facilities
Treatment has been reviewed and is in conformance with the Southeastern Oregon Resource Management Plan as detailed in the Documentation of Land Use Plan Conformance and NEPA Adequacy (DNA) prepared for this plan.

R13 - Monitoring
Monitoring of projects is consistent with direction in the Southeast Oregon RMP as well as the Vale District Normal Year ESR Plan.

COST SUMMARY TABLES

Emergency Stabilization (LF20000ES)

Action/ Spec #	Planned Action	Unit (Acres, WMs, Number)	# Units	Unit Cost (If Appl.)	FY 2012	FY 2013	FY 2014	FY 2015	Totals by Spec.
S1	Planning (Project Management)	WM'S	10	$40,500.00	$90,000	$305,000	$5,000	$5,000	$405,000
S2	Ground Seeding	Acres	78,546	$ 160.44	$6,169,000	$6,433,000	$ 0	$ 0	$12,602,000
S3	Aerial Seeding	Acres	224,235	$ 14.72	$831,000	$2,470,000	$ 0	$ 0	$3,301,000
S4	Seedling Planting								
S5	Noxious Weeds	Acres	50,000	$ 4.42	$ 0	$221,000	$ 0	$ 0	$221,000
S6	Soil Stabilization (Other than seedling, planting)	#	2	$29,000.00	$58,000	$ 0	$ 0	$ 0	$58,000
S7	Fence/Gate/Cattleguard	Miles	81	$8,716.05	$23,000	$683,000	$ 0	$ 0	$706,000
S8	Road/Trail Water Diversion								
S9	Cultural Protection (Stabilization/Patrol)	WM'S	2	$31,000.00	$ 0	$44,000	$9,000	$9,000	$62,000
S10	Tree Hazard Removal								
S11	Facilities	#	40	$1,500.00	$14,000	$38,000	$4,000	$4,000	$60,000
S12	Closures (area, OHV, livestock)	#	3	$220,333.33	$134,000	$419,000	$108,000	$ 0	$661,000
S13	Monitoring	Acres	558,198	$ 0.22	$ 0	$45,000	$38,000	$38,000	$121,000
S14	Other Treatments								
[redacted]	**TOTAL COSTS (LF20000ES)**				**$7,319,000**	**$10,658,000**	**$164,000**	**$56,000**	**$18,197,000**
OTHER FUND CODE TOTALS:					[redacted]				
[redacted]	TOTAL COSTS (???)								
[redacted]	TOTAL COSTS (???)								
[redacted]	TOTAL COSTS (???)								

Burned Area Rehabilitation (LF32000BR)

Action/ Spec #	Planned Action	Unit (Acres, WMs, Number)	# Units	Unit Cost (If Appl.)	FY 2012	FY 2013	FY 2014	FY 2015	Totals by Spec.
R1	Planning (Project Mgmt)	WM'S	20	$11,500.00	$ 0	$30,000	$100,000	$100,000	$230,000
R2	Ground Seeding								
R3	Aerial Seeding								
R4	Seedling Planting	Acres	67,000	$ 17.81	$ 0	$276,000	$526,000	$391,000	$1,193,000
R5	Noxious Weeds	#	2	$425,000.00	$ 0	$ 0	$816,000	$34,000	$850,000
R6	Soil Stabilization (Other than seedling, planting)								
R7	Fence/Gate/Cattleguard	Miles	350	$12,180.00	$ 0	$79,000	$2,353,000	$1,831,000	$4,263,000
R8	Road/Trail Water Diversion								
R9	Cultural Protection (Stabilization/Patrol)								
R10	Tree Hazard Removal								
R11	Facilities	#	120	$1,375.00	$ 0	$17,000	$103,000	$45,000	$165,000
R12	Closures (area, OHV, livestock)								
R13	Monitoring	Acres	558,198	$ 0.07	$ 0	$ 0	$18,000	$22,000	$40,000
R14	Additional Treatments								
[redacted]	**TOTAL COSTS (LF32000BR)**				**$0**	**$402,000**	**$3,916,000**	**$2,423,000**	**$6,741,000**
OTHER FUND CODE TOTALS:					[redacted]				
[redacted]	TOTAL COSTS (???)								
[redacted]	TOTAL COSTS (???)								
[redacted]	TOTAL COSTS (???)								

PART 2 - POST-FIRE RECOVERY ISSUES

EMERGENCY STABILIZATION ISSUES

1 - Human Life and Safety

Public safety risks have been identified regarding cross country travel on dozer lines within the fire perimeter. These unmarked routes are potentially hazardous and a press release has already been issued asking members of the public to stay on established roads and ways, and avoiding travel on rehabilitated fire lines. In addition, out of concern for public safety, and to protect the landscape from further damage, a cross country travel closure within the burned area is also being proposed as part of this planning effort. The proposed closure will allow the operation of motorized vehicles only on designated routes within the fire perimeter. Caution and Closure signs as well as maps will be posted throughout the fire on major travel ways.

Hwy 95 is a main trucking route from Nevada and California crossing Oregon and extending into Idaho. It is designated as a defense infrastructure route (Military Highway).

The primary concern is for public safety and transportation. Vegetation loss due to the fire may increase the amount of debris and sediment plugging culverts and an increase of blowing vegetation, soil, and snow, causing obstructions on the road and reducing visibility.

Due to the removal of vegetation it is estimated that snow fencing will need to be placed outside of the Right of Way (ROW) on BLM lands to assist in accumulation of snow and possibly silt. These sites have yet to be determined, actual analysis will determine locations and amount of snow fence required. Additional NEPA will need to be accomplished prior to implementation of this proposed treatment.

2 - Soil/Water Stabilization

The burn area consists of soils typical of the arid lands region. Although some of the burn

area has a more detailed Order 3 Soil Survey and Ecological Site Inventory completed, the area is less than 50% of the Long Draw fire. The following information comes from a more general Order 4 soil survey, Oregon’s Long-Range Requirements for Water General Soil information (State Water Resources Board, Owyhee Drainage Basin, 1969).

There are five general soil classification units within the burn area: Unit 76 (32% - 176, 000 acres); Unit 75 (22% - 122,500 acres); Unit 55 (19%, 103,500 acres); Unit s75 (10% - 53,000 acres); and Unit 77 (8%, 45,000 acres). Other minor general soil classifications include units: 50 (3%); 96 (3%); 56 (2%) and 1 (2%). The size of the burned area and the lack of a more detailed soils classification/survey limits precise, broad-scale descriptions of soils. However, the area is in the 8-12” precipitation zone, with variable capability for drill seeding. Vale District BLM has had drill seeding success in the north and

west quadrants of the burned area in the recent past.

Wind and water erosion is expected to occur in the burned area until adequate vegetation cover is re-established, usually 40 to 50% of the bare area. Intact biocrusts in the burned area provide protection against wind and water erosion. The burned area needs to be closed to livestock grazing to ensure the adequate recovery of the vegetation. Temporary fences would be needed to protect the new seedings and remaining vegetation re-establishment from livestock grazing while still allowing permittees access to the unburned portions of pastures and allotments. Native grasses and forbs are expected to recover naturally with protection from grazing. Long term soil protection would be enhanced by having more plant biomass above and below the ground surface. Increases in overland flows, combined with debris adjacent to, and left over from, the fire may likely overwhelm previously existing culverts along US Hwy 95. A section of fence modified to serve as a snow fence will need reconstruction. ODOT, in coordination with BLM, recommends additional, off-ROW catch fences for the anticipated dry-season wind-blown debris and during the winter in this high-wind area for blowing snow and visibility reduction minimization.

Approximately 200 acres of private land – known as Antelope Corral - are located at the confluence of Little Antelope and Big Antelope Creek (two of the primary drainages within the fire perimeter). There are three cabins, one camp trailer, one barn and two corrals located at this point. At the confluence, these systems drain approximately 199,000 acres (310 square miles), 65,000 acres (110 square miles) which were directly impacted by the fire. The upper elevation of the drainage is 6,384 feet, and the elevation at Antelope Corral is 4,622 ASL, a drop of 1,762 feet. It is currently not known of the range of effect various periodic precipitation events may have on the drainage, or the private holdings. Because of the lack of vegetation within the burned area (which serves to increase water infiltration and decreases overland flow) there is a potential for flood damage to the private property from average precipitation events with may result in extreme runoff. Vale District presently does not have staff capability to develop flow/event calculations adequately and will be requesting funding to this end. Flow/event calculations will be shared with the land owner and the NRCS to help them develop preventative protection measures.

3 - Habitat for Federal/State Listed, Proposed, or Candidate Species

The burned area contains 225,959 acres of Greater sage-grouse Preliminary Priority Habitat

(PPH); 224,687 acres of sage-grouse Preliminary General Habitat (PGH). Tewnty six leks were located within the burned are, most of the habitat around these leks was completely consumed by fire and little or no sagebrush remains within a mile of the leks.

This portion of the sagebrush steppe provided important wildlife habitat for sagebrush obligate species, including sage grouse, mule deer, pygmy rabbits, and bighorn sheep. Habitat fragmentation from fire was one of the highest concerns in the area pre-burn. It is important to try to restore sagebrush seed sources within the burn area while limiting or preventing the conversion of sagebrush communities into marginal or non-habitat. Wildfire and juniper encroachment were identified as the two largest contributing factors causing sagebrush habitat loss in the Oregon (Greater Sage-Grouse Conservation Assessment and

Strategy for Oregon Department of Fish and Wildlife, 2011). Invasive annual grass infestation and subsequent conversion into an annual grassland post-fire was considered in the design of the proposed treatments and is a concern of the Interdisciplinary Team (IDT). If sagebrush islands can be established within PPH and near identified sage-grouse lek locations it will promote habitat connectivity while providing a seed source for future natural re-establishment. Although the data was preliminary at the time this plan was prepared, the existence of sagebrush islands within the burn was considered when designing this proposal. As more accurate data becomes available this proposal might be updated. Aerial

seeding of sagebrush will not disturb the soil surface in areas with intact biological soil crusts, thus reducing the risk of annual invasion and conversion of sagebrush communities. Re-establishing sagebrush into this area will aid in restoring important habitat for sage-grouse and other sagebrush obligate species. In addition the burn area is important habitat for mule deer winter range, pygmy rabbits and bighorn sheep.

Suitability for seeding was based on risk of conversion to cheatgrass and the likelihood of seeding success. On a landscape, scale treatments of all areas was not feasible and multiple seed mixtures were developed to conform with land management guidance. Soils along with annual rainfall were also used to determine the appropriate use and probability of the seeded species success. Ultimately the IDT believes these factors will result in more efficient use of resources to complete Emergency Stabilization and Rehabilitation.

The northwestern half of the burned area has an unpublished Order 3 Soil Survey and Ecological Site Inventory data. The data is no more than four years old and some as current as this year. This data was used to determine the range type (site potential) and pre-burn ecological condition. Rangeland Health Assessment field sheet, photographs and field observations were used to estimate the range type and pre-burn condition of the southeastern portions that were affected by the fire.

4 - Critical Heritage Resources

The Long Draw fire affected 43 known cultural resource properties that are eligible or potentially eligible for inclusion to the National Register of Historic Places (NRHP). The Owyhee River Canyon and its major tributaries are known to contain rock shelter sites that have potential for stratified subsurface archeological deposits.

5 - Invasive Plants and Weeds

There are scattered populations of noxious weeds in the burn area and general vicinity of the fire, including small sites of Russian knapweed (Acroptilon repens), spotted knapweed (Centaurea maculosa), diffuse knapweed (Centaurea diffusa), yellow starthistle (Centaurea solstitialis), perennial pepperweed (Lepidium latifolium), whitetop species (Lepidium ssp), halogeton (Halogeton glomeratus) and a new invasive grass, ventenata (Ventenata dubia).

In addition to the scattered sites of small infestations there are several specific areas of concern with larger populations and densities. One large site of Scotch thistle (Onopordum acanthium) has been documented and was being treated within the Dry Creek Native Pasture of the Jackies Butte Summer Allotment. Recently, rush skeletonweed (Chondrilla juncea) was found within the Scotch thistle site. Scotch thistle is a biennial with fluctuating

juncea) was found within the Scotch thistle site. Scotch thistle is a biennial with fluctuating periods of germination which makes it impossible to control in one treatment. Access for treatment in this specific area entails a long arduous trip with ATVs/UTVs or aerial treatment. Rush skeletonweed is a deep-rooted perennial and is extremely difficult to control. Both species have seeds with pappus which enables them to spread via wind literally for miles in any direction therefore, they could easily spread throughout the burned area if left untreated.

The US 95 corridor is a natural conduit for noxious weeds from infested areas long distances outside of the Vale District. Many miles of the highway within the burned area on both the north and south bound lanes between McDermitt and Whitehorse road have been monitored and treated yearly for numerous species, especially the knapweed complex that includes Russian, diffuse and spotted knapweeds, and yellow starthistle. These species, especially diffuse and spotted knapweeds, and yellow starthistle, are in the Asteraceae family and have pappus on the seeds and thus could easily invade the burned area.

Russian knapweed and whitetop ssp. are most prevalent around Bowden Ranch and Rattlesnake Creek areas. Ventenata was discovered in 2011 from the top of Jackson Grade to the north approximately 3 miles and also at Coyote Holes.

Invasive species including cheatgrass (Bromus tectorum), medusahead (Taeniatherum caput-medusae), various annual mustards, including tumble mustard (Sisymbrium altissimum), Russian thistle (Salsola kali) etc., are common throughout the area.

In the absence of competition, the burn area would be extremely vulnerable to expansion or invasion by any of these highly competitive noxious and/or invasive annuals, biennials and perennial weed species. Weed control within the burn area would help prevent invasive/noxious species from dominating the site.

BURNED AREA RECOVERY ISSUES

1 - Lands Unlikely to Recover Naturally

The treatment area contains almost 226,000 acres of Preliminary Priority Habitat (PPH). 261,123 acres of Preliminary General Habitat (PGH) and is a critical component of the adjacent, currently occupied range of sage-grouse.

Natural regeneration of sagebrush can take decades and is often difficult to self-propagate, particularly in low elevation Wyoming sagebrush sites.

Without treatment the area is susceptible to conversion to a site dominated by cheatgrass and other invasive or noxious weed species. The burn area will be vulnerable to invasion until remaining desirable perennial vegetation has recovered and seeded species have established.

2 - Weed Treatments

Scotch thistle (Onopordum acanthium), Russian knapweed (Acroptilon repens), spotted

knapweed (Centaurea maculosa), diffuse knapweed (Centaurea diffusa), yellow starthistle (Centaurea solstitialis), perennial pepperweed (Lepidium latifolium), whitetop species (Lepidium ssp), halogeton (Halogeton glomeratus) are located within the burn area. Rush skeletonweed (Chondrilla juncea) was found in an initial survey following the fire and a new invasive grass, ventenata (Ventenata dubia), was found in 2011. Noxious weed inventory and treatment would help to control existing populations, help discover new populations, and reduce the risk of further establishment of noxious weeds. Invasive species including cheatgrass (Bromus tectorum), medusahead (Taeniatherum caput-medusae), various annual mustards, including tumble mustard (Sisymbrium altissimum), Russian thistle (Salsola kali) etc., are common throughout the area.

Without treatment the area is susceptible to conversion to a site dominated by cheatgrass and other invasive or noxious weed species. The burn area will be vulnerable to invasion until remaining desirable perennial vegetation has recovered and seeded species have established. The proposed treatments are designed to limit the likelihood of invasive species encroachment into sage-grouse and other sagebrush-obligate species habitats, and to facilitate the re-establishment of vegetation which can be used as fire breaks.

3 - Tree Planting

N/A

4 - Repair/Replace Fire Damage to Minor Facilities

The fire burned 17 BLM directional and informational signs posted along roads and at points of interest. Directional and Informational signs are in place to guide visitors to better maintained travel routes and also to key points of interest. Directional and informational signage plays a significant role in the safety and enjoyment of public lands by visitors.

The fire burned approximately 100 carsonite signs along existing open routes and at intersections of unauthorized “illegal” routes within Wilderness Study Areas. To ensure environmental protection, this proposal will replace all carsonite signs damaged by the fire within the Wilderness Study Areas.

PART 3 - DESCRIPTION OF TREATMENTS

Issue 1 - Human Life and Safety

S7 Fence/Gate/Cattleguard

A. Treatment/Activity Description

Approximately 43 miles of existing management fence is being proposed for reconstruction or repair for human life and safety. 23.4 miles of this fence is the Coyote Lake/Alvord-Tule Springs Herd Management Area boundary fence along U.S. Highway 95. This BLM built fence needs to be repaired in order to prevent wild horses from becoming roadside hazards along this main traffic route from Boise, Idaho to Winnemucca, Nevada. 19 miles of this fence is the Jackie's Butte Herd Management Area boundary fence that was burned beyond repair due to the fire. This fence will need to be reconstructed to prevent the movement of wild horses to areas outside of the Jackie's Butte Herd Management Area.

Approximately 29 miles of 3 strand temporary protective fence would be constructed to separate the burn area from unburned portions of the affected pastures which will be closed in part to livestock grazing. Some sections of the proposed temporary fences exclude livestock access to nearby known sage-grouse breeding lek locations. Eight miles of temporary fence will be located within a two mile radius of a sage-grouse lek and will be marked for visibility to prevent accidental collision. Proposed temporary fence locations have been reviewed by the wildlife biologist and adjusted accordingly. Where it is feasible, temporary fences would tie into existing management fences. The temporary fence would be removed when it was no longer deemed necessary to exclude livestock from the burned area.

In addition to the 29 miles of temporary protective fence, 9 miles of existing fence which was damaged by the fire is proposed for repair in order to support the temporary fences to protect the burn area. These fences need to be repaired so livestock authorized to be in neighboring pastures can't access the burn area. All interior damaged fences are included under BAR Issue 4 (R7).

B. How does the treatment relate to damage or changes caused by the fire?

The goal of the treatment is to stabilize the soils and protect the burn area from grazing impacts to allow recovery of vegetative and habitat resources and establishment of seeded species. The construction of temporary fences and repair of existing fences would allow the site to recover while maximizing protection of soil and vegetative resources. Minimizing direct and indirect impacts during the critical vegetation recovery and soil stabilization period immediately post-fire are fundamental to these actions. Additionally, repair of fence along Highway 95 and around the HMA's will keep wild horses off of the highway.

C. Why is the treatment/activity reasonable, within policy, and cost effective?

Protection fences would enable the permittees to utilize their grazing preference until vegetative objectives are met. These fences would be effective in eliminating livestock from the burned areas. Installation of temporary fences and repair/reconstruction of existing

management fences are necessary for orderly rangeland administration. Monitoring is detailed in part 8 of this document. The treatment is cost and resource effective by allowing the site to stabilize and would minimize erosion in the long term. Costs are detailed in part 4 of this document. Repair of damaged management fences that will keep wild horses off of Highway 95 protects travelers from collisions.

S11 Facilities

A. Treatment/Activity Description

Public Information/Hazardous Routes Signs:

The fire burned 17 Directional and Informational signs posted along roads and at points of interest. Directional and Informational signs are in place to guide visitors to better maintained travel routes and also to key points of interest. Many of our roads are poorly maintained, and these signs assist the public in making route choices that are appropriate for their vehicle and outdoor experience level. Directional and Informational signage plays a significant role in the safety of public lands visitors.

U.S. Highway 95 Oregon Department of Transportation (ODOT) Concerns:

Contact was made with Oregon Department of Transportation (ODOT). Individuals from ODOT conducted site investigations within the burned area and provided information on the locations of culverts and estimates for the implementation of structures.

Entrances to culverts on highway 95 within the burned area will be armored with rock riprap to catch debris being washed down drainages into the culverts. This material will also trap sediment coming into the pipes. In the advent of an intense rain storm or rapid snow melt event the riprap will reduce the chance culverts will be plugged causing water and debris to be washed over the road. This will be funded by ODOT. If additional debris catching measures (straw wattles etc) are needed outside the highway right of way, BLM will install them in cooperation with ODOT.

Reconstruction of previously existing snow fences would be funded by ODOT. Additional catch fences for year-round wind-driven debris, dust and snow may be constructed, in coordination and labor-sharing work with the Oregon Department of Transportation. This will assist ODOT in keeping the route open in periods of blowing and drifting snow and soil. The fences would be constructed of rock crib anchors with lath fencing spaced between the anchors.
Coordination and implementation would be conducted under the guidance of the Wyden Amendment. A cooperative agreement would have to be developed before installation of the fences outside the ROW.

B. How does the treatment relate to damage or changes caused by the fire?

Public Information/Hazardous Routes Signs:

Placement of these signs is necessary for public safety in addition to protecting the

Placement of these signs is necessary for public safety in addition to protecting the recovering resources. This treatment is anticipated to be a relatively effective method of informing the public of the risks posed by rehabilitated fire lines post-fire.

U.S. Highway 95 Oregon Department of Transportation (ODOT) Concerns:

Culverts: The loss of vegetation will decrease some level of pre-fire evapotransporation due to loss of vegetation and higher runoff events will occur, bringing both increase, flashy flooding and increased debris.

Debris/Dust/Snow Fences: Due to the intensity of the fire almost all shrubs and herbaceous vegetation was removed from the slopes adjacent to the highway. This reduction in vegetation will increase the ability of water and wind to translocate material from one location to another. The snow and soil fences will reduce the velocity of the wind and cause vacuums on the leeward side collecting snow on both sides of the fence. It is expected to reduce the volume of material blowing on the road and the time the highway department would spend on keeping the roads clean. It would also improve visibility and, therefore provides a safer driving environment for travelers and commercial traffic.

C. Why is the treatment/activity reasonable, within policy, and cost effective?

Public Information/Hazardous Routes Signs:

Signs are intended to inform the public and ensure their safety while protecting the recovering resources as it is our mission to sustain the health, diversity and productivity of the public lands for the use and enjoyment of present and future generations. This treatment is cost effective, because the sign design can be easily implemented. They will provide important information to members of the public at a reasonable cost.

U.S. Highway 95 Oregon Department of Transportation (ODOT) Concerns:

Both the culvert hardening by ODOT and the fence reconstruction and new construction as necessary outside of the highway ROW will increase the safety of travelers along Hwy 95 throughout the year and reduce the potential for structural impacts to the highway. The projects are reasonable in that the fire damage has resulted in this increased risk, and is fundamentally consistent with policy. The actions support limiting impacts to public safety from potential hazards resulting from the fire; the costs should be balanced against the risks.

Issue 2 - Soil/Water Stabilization

S6 Soil Stabilization (Other than seedling, planting)

A. Treatment/Activity Description

Protection of Private Property

Treatment options will vary, depending on completion of hydrologic/engineering analysis (funding requested in this Plan), but may include flow detention/retention structures, flow velocity reduction structures, additional vegetative planting, among others. Costs will vary

both by the risk of damage based on flow event calculations and by varied protection methods immediate to the private property/structures, or further upstream. Flow management methods may include rock dams, silt fences, wattles, ditch turnouts, culverts, or other appropriate methods.

Soil Stabilization:

Minimizing concentration of flows at points within watersheds that may damage existing transportation infrastructure or range facilities. The primary concern to protect the private lands is reducing the amount of erosion near roads and entering drainages. As with the above, Vale District proposes utilizing hydrologic/engineering expertise to develop proposals for mitigating impacts from the fire, until vegetation returns to pre-fire levels.

B. How does the treatment relate to damage or changes caused by the fire?

Protection of Private Property:

The fire reduced or eliminated vegetation on uplands, the slopes adjacent to roads, in canyons and drainages. The elimination of the vegetation by the fire increases the possibility of water moving overland and in the bottom of drainages. The purpose to be achieved is the protection of the structures in the canyon by communicating to the land owner and the NRCS the projected severity of spring runoff.

Soil Stabilization:

The removal of vegetation by the fire has exposed the soil surface to erosion from precipitation and wind. The removal of vegetation combined with slope and previous soil disturbing activities (roads, livestock impact) would make hillslopes prone to erosion.

The purpose to be achieved from the treatment is protection of existing roads from erosion and the reduction of sediment into the drainages. Monitoring the percent of soil lost would be employed to determine soil loss of the burned area in comparison to unburned areas. Priority would be given to roads, rills, and trails leading into the drainages. A nail and washer grid technique would be used to determine translocation of soil. At selected locations plots will be located at the top, middle and at the bottom of the slope to determine effects of the treatments. The objective would be to limit soil loss to no more than 20 % of an undisturbed area. With proper design and implementation of effective erosion control practices, erosion could be reduced by 70 to 80% on burned areas.

C. Why is the treatment/activity reasonable, within policy, and cost effective?

Protection of Private Property:

A primary BLM policy objective is protection of life and property. Protection efforts which would control the average annual precipitation events above the private property balances reasonable protection efforts and the risk of a higher flow event damaging or destroying

private property, and potentially residents who a regularly at the location. The potential for legal claims on the BLM is possible, should we not make acceptable levels of effort to minimize impacts likely to be a caused in part by the fire.

Soil Stabilization:

The immediate need is to protect existing BLM range improvements, transportation infrastructure, and resources resulting from increased overland flow due to the loss of vegetation in the area of the fire. Increased runoff will likely result in down cutting, concentration of flows, over-capacity flows for culverts, water bars, stream crossings and barrow pits along roads. Projects will be designed to protect these resources and facilities until vegetation is re-established to pre-fire conditions.

The treatments would be cost effective by reducing the amount of road maintenance required, sediment entering water courses and protecting riparian areas. Actual quantities are difficult to determine without site specific information. These activities are considered Best Management Practices and are covered in Appendix O of the SEORMP and Appendix 8 of the Expenditure guidance for ES&R funds.

S12 Closures (area, OHV, livestock)

A. Treatment/Activity Description

Grazing:

The allotments and pastures that were burned in the fire would be closed, in whole or in

part, to livestock grazing until vegetation objectives in the burn area are met. Implementation of temporary protective fences, repair and reconstruction of some existing livestock management fence that was damaged by the fire will be necessary to implement this activity. Permittees would be responsible for keeping their livestock off the recovering and rehabilitated areas in compliance with either grazing decisions or range agreements issued by the Jordan Field Office.

Herd Management Area Closures:

The Jackies Butte Herd Management Area (HMA) and the Coyote Lake/Alvord-Tule Springs HMA are within the perimeter of the Long Draw fire. 73% of the Jackies Butte HMA was burned and 3% of the Coyote Lake/Alvord-Tule Springs HMA was burned by the fire. At the time of the fire the current number of horses within the Jackies Butte HMA was 85 and the current number within the Coyote Lake/Alvord-Tule Springs HMA was 230. An emergency gather was requested by the Vale District Office and then funded by the Oregon State Office (OSO). Approximately 85 wild horses have been gathered from the Jackies Butte HMA. 65 of the 85 horses are being shipped to short-term holding and the remaining 20 are entering the adoption program. As soon as the vegetative resources recover to the extent at which a balance between a healthy sustainable wild horse population can be maintained with resource conditions, then the 65 wild horses will be returned to the HMA. Approximately 100 wild horses would be gathered from the Coyote Lake/Alvord-Tule Springs HMA, leaving 130 on the Burns District side of the Coyote Lake/Alvord-Tule

Springs HMA. As soon as the vegetative resources recover to the extent at which a balance between a healthy sustainable wild horse population can be maintained with resource conditions than 50 wild horses will be returned to the Coyote Lake/Alvord-Tule Springs HMA. The remaining 50 wild horses from the Coyote Lake/Alvord-Tule Springs HMA will then go from short-term holding into long-term holding or into the adoption program

Recreation (OHV):
Over 50 % of the burned area is presently classified under the Southeastern Oregon RMP as open (ie., cross country motorized traffic is allowed) for OHV access. The entire burned area is proposed for closure to cross-country travel (permitting continued use on existing roads and trails) to protect pre-fire occupied sage-grouse habitat and support vegetation recovery. Suppression rehabilitation and signage are addressed specifically below.

88 miles of dozer line have been inventoried within the fire perimeter. There are 40 intersections of dozer line and existing roads which have been identified. In order to ensure public safety we are proposing to place carsonite signs at each of these intersections to inform public users that the dozer line is closed to motor vehicles (see map 8). This will ensure public safety along with resource protection while existing perennial vegetation recovers.

20 locations have been identified for emergency closure signs with mapping of designated open road routes (see map 8). The hazardous road, stay on designated routes and open road maps will all be monitored from the time the sign is placed through Spring of 2014. When a sign has been vandalized or removed the sign will be replaced.

B. How does the treatment relate to damage or changes caused by the fire?

Grazing:

Closing the burned portion of affected allotments and pastures to livestock grazing is essential for soil stabilization and to provide the opportunity for seeding treatments to become established and existing vegetation to stabilize. Closure would facilitate the recovery of the shrub and herbaceous (forage) components of the burned plant communities, including perennial grasses, forbs and shrubs. Recovery of plant cover in the burned areas would stabilize the burned landscape and reduce the potential for wind and water erosion.

Herd Management Area Closures:

The fire burned a large portion of the available forage within the HMA, therefore the goal is to remove wild horses so the population does not starve while also allowing vegetation to recover from the wildfire.

Recreation (OHV):
Curtailment of cross-country motorized travel through placement of signs is necessary for public safety in addition to protecting the recovering soil, vegetation and habitat resources. This treatment is anticipated to be a relatively effective method of informing the public of the risks posed by rehabilitated fire lines post-fire.

C. Why is the treatment/activity reasonable, within policy, and cost effective?

Grazing:

In accordance with BLM policy and the Southeastern Oregon Resource Management Plan, the burn area would be closed to livestock grazing for at least two growing seasons at a minimum or until desired vegetation has recovered to levels adequate to support and protect upland function. The Jordan Field Office will prepare rangeland agreements or grazing decisions to implement the closure.

Herd Management Area Closures:

Without removal the wild horses would concentrate grazing on their preferred range within the HMA and convert the desired vegetation to invasive annual species. Temporary removal would allow the burn area to stabilize and recover which would allow for a viable wild horse herd in the long term. The treatment is in conformance with BLM Handbook H-4700-1 Wild Horses and Burros Handbook (2010). This treatment is cost effective because without removal of wild horses proposed noxious weed treatment and seeding success could be compromised. Conversion to annual species will also increase the costs of future management. Costs are detailed in Part 4 of this document.

Recreation (OHV):
Closure to cross-country motorized travel is reasonable under temporary restrictions to encourage re-establishment of vegetation and habitat needs. The existing route (roads and trails) network will continue to provide public and administrative access to the area without undue impact.

Signs are intended to inform the public and ensure their safety while protecting the recovering resources as it is our mission to sustain the health, diversity and productivity of the public lands for the use and enjoyment of present and future generations. This treatment is cost effective, because carsonite signs can be easily implemented and are replaceable. They will provide important information to members of the public at a reasonable cost.

S13 Monitoring

A. Treatment/Activity Description

Effectiveness monitoring would be completed on identified stabilization activities within this plan using a variety of methods further detailed in the monitoring section of this plan, including but not limited to vegetation monitoring protocols.

B. How does the treatment relate to damage or changes caused by the fire?

N/A

C. Why is the treatment/activity reasonable, within policy, and cost effective?

Monitoring of treatments is important to validate the success of each treatment.

Issue 3 - Habitat for Federal/State Listed, Proposed, or Candidate Species

S2 Ground Seeding

A. Treatment/Activity Description

Overall objectives of ground-based seedings are to: (a) avoid additional disturbance in areas unlikely to benefit from new or additional treatments or with a high probability of creating a niche for additional invasion of cheatgrass, (b) avoid additional disturbance in areas likely to recover naturally, and (c) target areas for treatment with the greatest likelihood of: successful germination and growth of seedings; establishing fire breaks to limit future large fires; and/or establishing sage-grouse and other sagebrush-obligate species habitat recovery as rapidly as possible.

Grass Seeding:
Approximately 78,546 acres of public land in the burned area would be seeded using rangeland drills and multiple seed mixes (see map 4). Specific treatments and seed mixes are discussed in detail below. All treatments will be completed during the fall of 2012.

Evaluation of suitability for seeding occurred over the entire burned area. The suitability evaluation of 47% (259,000 acres) of the burned area was based on data that had been collected within the last 4 years in preparation of an Order 3 Soil Survey and Ecological Site Inventory. Suitability evaluation of the remaining portion of the burned areas was based on previously collected rangeland health assessments (both write up forms and supporting photos) as well as input from field going personnel with personal knowledge of the pre burn condition. Wyoming sagebrush sites that were determined to be in late seral or climax condition prior to the burn were not considered for ground seeding. Because of their pre-burn ecological condition they are at low risk for site conversion to cheat grass. Black sage sites, salt desert shrub communities and very droughty Wyoming sagebrush sites are at high risk for site conversion to cheatgrass dominance but were determined not to be suitable for seeding as they generally do not receive sufficient annual moisture for successful seeding establishment. Wyoming sagebrush sites that were in early or mid seral condition were determined to be at the highest risk for site conversion to cheat grass and were generally considered the most suitable for seeding. Some early or mid-seral condition Wyoming sagebrush sites had already been converted to cheat grass dominated sites due to previous fires and/or management practices and were excluded from consideration for treatment. Some early to mid seral Wyoming sagebrush sites above the 10 inch precipitation zone were considered to be at low risk for conversion to cheatgrass due to the pre-burn understory dominance of Sandburg bluegrass and were therefore considered not suitable for seeding. All of the areas selected for treatment were determined to be suitable for seeding based on the high probability of converting to cheatgrass dominated communities should no treatment occur and also had a high probability of seeding establishment.

Native – Non Native Seedings (see map 4)
Within the burned area to the west of US highway 95 on the portions that hosted early and mid seral Loamy 10-12, Loamy 8-10 and Shallow Loam 8-10 range sites (Wyoming sagebrush communities with Thurbers Needlegrass dominated understory and Bluebunch Wheatgrass) a mix of native and non native grass seeds would be seeded using a modified rangeland drill. The majority (over 80%) of this area is Greater sage-grouse Preliminary

Priority habitat; the treatment seed mix and application method is intended to stabilize the surface and expedite habitat recovery. The seed mix would contain bluebunch wheatgrass (Pseudoroegneria spicata), Snake River Wheatgrass (Elymus wawawaiensi), Siberian Wheatgrass (Agropyron sibericum), Russian Wildrye (Psathrostachys juncea), and Wyoming sagebrush (Atremesia tridentata var. wyomingensis). The burned area to the west of the highway is land found to have wilderness characteristics in the most recent inventory of wilderness characteristics. The Vale District is in the process of amending the Resource Management Plan, which is to include, inter alia, management objectives for lands with wilderness characteristics. Modifying a standard rangeland drill by pulling the seed tubes free from the disc arms will allow the seed to dribble out of the seed box and fall upon the seed bed in a non linear manner (much like a drop spreader). The discs at the rear of the drill will scarify the soils and the drag chains will be looped together and act as a harrow and incorporates the scarified soil and seed together. This modified rangeland drill technique greatly reduces the linear establishment of seeded species and would not have an impact on the values of the lands with wilderness characteristic.

The burned area East of US highway 95, south of the overshoe road, and the Winter Area South Pasture of the Eiguren Allotment, on the portions that hosted early and mid seral Loamy 10-12, Loamy 8-10 and Shallow Loam 8-10 range sites (Wyoming sagebrush communities with Thurbers Needlegrass dominated understory and Bluebunch Wheatgrass) a mix of native and non-native grass seeds would be seeded using a rangeland drill. The seed mix would contain bluebunch wheatgrass (Pseudoroegneria spicata), Snake River Wheatgrass (Elymus wawawaiensi), Siberian Wheatgrass (Agropyron sibericum), Russian Wildrye (Psathrostachys juncea), and Wyoming sagebrush (Atremesia tridentata var. wyomingensis). The burned area to the east of the highway is land not found to have wilderness characteristics in the most recent inventory of wilderness values.

Sagebrush seeding
Vale District has had significant success in seeding sagebrush in certain, specific areas with ground-based methods. ESI and GIS data, staff expertise specifically identified proposed seeding areas that provide the best probability of sagebrush seeding success, particularly in areas categorized as Greater sage-grouse PPH.

If no conflicting issues are identified, sagebrush seed would be applied to approximately a third of the proposed drill seeding treatment areas, i.e. one drill out of three will seed sagebrush. This is dependent on rangeland drill availability as sagebrush seed requires a fluffy seed box. Sagebrush seed would be applied using rangeland drills which would be trailed by a cultipacker to compress the sagebrush seed into the soil surface. Sagebrush seed applied using a rangeland drill with a fluffy box will be applied at 2 lbs per acre.

Non native Seeding (see map 4)
The burned area east of US highway 95, along the Bowden Ranch road, outside the WSA and the 1960s Vale Project era crested wheatgrass seedings, on the portions that hosted early and mid seral Loamy 10-12, Loamy 8-10 and Shallow Loam 8-10 range sites (Wyoming sagebrush communities with Thurbers Needlegrass dominated understory and Bluebunch Wheatgrass) would be seeded with a mix of non native grass seeds. The seed mix would contain Siberian Wheatgrass (Agropyron sibericum), and Russian Wildrye (Psathrostachys juncea). The portion along the Vale Project era seedings would be seeded

using an unmodified rangeland drill. No sagebrush seed would be added to the mix.

For all ground seedings:
Proposed restoration activities involving ground seeding are considered undertakings warranting review and compliance with Section 106 of the National Historic Preservation Act. This work needs to be conducted in consultation with the State Historic Preservation Officer , affected Indian tribes and others as appropriate. BLM is developing specific plans for conducting archaeological survey and site identification services focusing on emergency stabilization of burned areas including ground seeding where these activities have the potential to affect cultural properties. It is cautiously estimated that nearly 54,000 acres of proposed ground seeding areas will require cultural resources inventory at some level for the Long Draw Fire Recovery Project. In addition, cultural resource monitoring and stabilization is proposed for at least 40 known cultural sites within the burned areas; other un-documented sites in un-surveyed but high probability areas such as the Owyhee Canyon where significant rock art and rockshelter sites are predicted to occur may require examination to determine damages in these areas. Cultural resource compliance activities for the project are likely to receive a high level of scrutiny by tribes and others.

B. How does the treatment relate to damage or changes caused by the fire?

Grass Seeding:
The goal of the treatment is to stabilize the site with competitive perennial vegetation and minimize erosion in the long term. Soils within the burn area are primarily loamy and susceptible to wind erosion in the short term until vegetative cover is restored. The treatment would stabilize the site by preventing conversion to annual and undesirable species. The treatment area receives from 8 to 12” of precipitation annually. Similar treatments have been done successfully on numerous projects in the area with similar soils, vegetation and precipitation.

Sagebrush Seeding

Priority for sagebrush seeding treatments has been placed on units and application methods and equipment that provide the highest probability of re-establishment of sagebrush, particularly in Greater sage-grouse Priority and General habitat. The significant loss of sage-grouse habitat resulting from this fire both impacts the adjacent remaining habitat and isolates remaining large areas of pre-burn habitat from others.

C. Why is the treatment/activity reasonable, within policy, and cost effective?

Grass Seeding:
Treatments have been reviewed and are in conformance with the Southeastern Oregon Resource Management Plan (2002). The treatment area receives from 8-12” of precipitation annually. Treatment is cost and resource effective, would stabilize the site and minimize erosion in the long term. Costs are detailed in part 4 of this document. Monitoring will be conducted to determine whether the following objectives are reached: Establishment of

seeded grass densities of 1.5 plants per square meter (m^2) by the end of the third growing season following implementation of seeding. According to the BLM Burned Area Emergency Stabilization and Rehabilitation handbook H-1742-1, drill seeding is the preferred method for planting most types of seed and can achieve better plant establishment.

Sagebrush Seeding

Re-establishment as quickly as possible of sage-grouse and other sagebrush obligate species habitat is critical both locally and regionally. The loss of habitat from this fire will have long term impacts on the health and population numbers of the species. Priority of these treatments has been placed on this objective, including the recognition that lands both within the burned area and adjacent lands currently occupied by sage-grouse are extensive enough to effect regional and national sage-grouse planning.

S3 Aerial Seeding

A. Treatment/Activity Description

Aerial seeding (see map 4)

Aerial seeding objectives vary across the burned area, depending on: likelihood of success given soil and environmental conditions when followed by chaining, avoidance of ground disturbance in critical sage-grouse habitat, and avoidance of impacting lands found to possess wilderness characteristics. The burn area includes some of the west's greatest densities of Greater sage-grouse, along with what was some of the most intact, contiguous extents of Preliminary Priority Habitat, in addition to Preliminary General Habitat.

Approximately 28,366 acres of public land in the burned area would be aerially seeded followed by chaining to incorporate the seed into the soil with multiple seed mixes. Specific treatments and seed mixes are discussed in detail below. All treatments will be completed during the fall of 2012.

Evaluation of the suitability for seeding occurred over the entire burned area. The suitability evaluation of 47% (259,000 acres) of the burned area was based on data that had been collected within the last 4 years in preparation of an Order 3 Soil Survey and Ecological Site Inventory. Suitability evaluation of the remaining portion of the burned areas was based on previously collected rangeland health assessments (both write up forms and supporting photos) as well as input from field going personnel with personal knowledge of the pre burn condition. Wyoming sagebrush sites that were determined to be in late seral or climax condition prior to the burn were not considered for ground seeding. Because of their pre-burn ecological condition they are at low risk for site conversion to cheat grass. Black sage sites, salt desert shrub communities and very droughty Wyoming sagebrush sites are at high risk for site conversion to cheatgrass dominance but were determined not to be suitable for seeding as they generally do not receive sufficient annual moisture for successful seeding establishment. Wyoming sagebrush sites that were in early or mid seral condition were determined to be at the highest risk for site conversion to cheat grass and were generally considered the most suitable for seeding. Some early or mid-seral condition

Wyoming sagebrush sites had already been converted to cheat grass dominated sites due to previous fires and/or management practices and were excluded from consideration for treatment. Some early to mid seral Wyoming sagebrush sites above the 10 inch precipitation zone were considered to be at low risk for conversion to cheatgrass due to the pre-burn understory dominance of Sandburg bluegrass and were therefore considered not suitable for seeding.

All of the areas selected for treatment were determined to be suitable for seeding based on the high probability of converting to cheatgrass dominated communities should no treatment occur and also had a high probability of seeding establishment.

Natives Only Seeding (see map 4)
Within the Bowden Hills Wilderness Study Area (WSA see map 8) a mix of native grass seeds would be aerially applied on the portions that hosted early and mid seral Loamy 8-10 and Shallow Loam 8-10 range sites (Wyoming sagebrush communities with Thurbers Needlegrass dominated understory and Bluebunch Wheatgrass) and then incorporated into the top ¼ inch of soil by pulling a smooth chain over it. The seed mix would contain bluebunch wheatgrass (Pseudoroegneria spicata), locally collected Thurber's needlegrass (Achnatherum thurberianum), Snake River Wheatgrass (Elymus wawawaiensis), bottlebrush squirreltail (Elymus elymoides), and Wyoming sagebrush (Artemisia tridentata var. wyomingensis). The use of only native species is consistent with the interim management policy (IMP) for Wilderness Study Area. The aerial broadcasting of the seed, followed by chaining would avoid the linear establishment of the seeded plants that often occurs with traditional rangeland drill applications. This technique would not impair the WSA's suitability criteria for Wilderness designation.

Native – Non Native Seedings (see map 4)
The burned area east of US highway 95 south of Jackies Butte, north and west of the blue gate road on the portions that hosted early and mid seral Loamy 10-12, Loamy 8-10 and Shallow Loam 8-10 range sites (Wyoming sagebrush communities with Thurbers Needlegrass dominated understory and Bluebunch Wheatgrass) a mix of native and non native seeds would be seeded by an aerial application of the seed and then incorporated into the top ¼ inch of soil by pulling a smooth chain over it The seed mix would contain bluebunch wheatgrass (Pseudoroegneria spicata), Snake River Wheatgrass (Elymus wawawaiensi), Siberian Wheatgrass (Agropyron sibericum), Russian Wildrye (Psathrostachys juncea), and Wyoming sagebrush (Artemisia tridentata var. wyomingensis).

These burned areas are lands not found to have wilderness characteristics in the most recent inventory of wilderness values.

Non native Seeding (see map 4)
The burned area east of US highway 95, along the Bowden Ranch road, outside the WSA and the 1960s Vale Project era crested wheatgrass seedings, on the portions that hosted early and mid seral Loamy 10-12, Loamy 8-10 and Shallow Loam 8-10 range sites (Wyoming sagebrush communities with Thurbers Needlegrass dominated understory and Bluebunch Wheatgrass) would be seeded with a mix of non native grass seeds. The seed mix would contain Siberian Wheatgrass (Agropyron sibericum), and Russian Wildrye (Psathrostachys juncea). No Wyoming sagebrush will be added to this mix. The portion

along the Bowden ranch road will be seeded with an aerial application followed by chaining.

Proposed restoration activities involving aerial seeding are considered undertakings warranting review and compliance with Section 106 of the National Historic Preservation Act. This work needs to be conducted in consultation with the State Historic Preservation Officer , affected Indian tribes and others as appropriate. BLM is developing specific plans for conducting archaeological survey and site identification services focusing on emergency stabilization of burned areas including aerial seeding where these activities have the potential to affect cultural properties. It is cautiously estimated that nearly 12,700 acres of aerially seeded/chained areas will require cultural resources inventory at some level for the Long Draw Fire Recovery Project. In addition, cultural resource monitoring and stabilization is proposed for at least 40 known cultural sites within the burned areas; other un-documented sites in un-surveyed but high probability areas such as the Owyhee Canyon where significant rock art and rockshelter sites are predicted to occur may require examination to determine damages in these areas. Cultural resource compliance activities for the project are likely to receive a high level of scrutiny by tribes and others.

Aerial Seeding of Sagebrush Only:
Of the 558,198 acres burned by the Long Draw fire 225,959 acres was designated as

sage-grouse PPH and an additional 224,687 acres was designated as sage-grouse preliminary General Habitat (PGH).

This plan proposes aerial seeding of sagebush on 85,000 acres. The majority of the sagebrush is Wyoming (Artemisia tridentate var wyomingensis) and low sage (Artemisia arbuscula). Neither of these species reproduce by sprouting after fire. Therefore, regeneration of these sagebrush species is dependent on a seed source. This plan recognizes the low probability of success by aerial seeding and the difficulty of getting the amount of seed requested, but Vale BLM believe this proposal is justified due to the lack of available options and the large amount sagebrush destroyed by the fire.

The probability of regenerating sagebrush is greatly increased by breaking the ground through various methods, however most of the areas proposed for aerial seeding of sagebrush has not burned in over 100 years and has little or no noxious weeds or cheatgrass. Breaking the soil curst to improve the seed bed will undoubtedly improve sagebrush regeneration, but will also greatly increase the amount of cheatgrass and increase the risk of repeated burning. Given these conditions, aerial seeding remains the most viable option for long term recover of sage grouse and sagebrush habitat.

85,000 acres of PPH will be aerially seeded in locations that will not receive other sagebrush treatments. All aerial seeding application is proposed to be seeded at a rate of 1lb/acre. Sagebrush seed has been readily available in the past; however this application rate or number or number of acres can be reduced depending on seed availability. Aerial sagebrush seeding in addition to other proposed focused sagebrush treatments are represented on map (5). The other treatments are sagebrush seed scattering and the planting of sagebrush plugs and/or bare root seedlings within a ½ mile of identified leks.

Aerial seeding treatments were selected over other methods, because a large area within the fire perimeter was previously undisturbed or minimally disturbed. A large majority of this area has intact biological soil crusts and by using aerial seeding to minimize disturbance the chance of converting this area to marginal or non-habitat would be minimized. Patch seeding within the project area could be considered, however due to conflicting values and additional NEPA analysis aerial strip seeding might not be feasible in portions of sage-grouse PPH.

Most of the burn area specifically south of the Blue Gate Road had a good mix of native perennial grasses and forbs including bluebunch wheatgrass, Idaho Fescue and Sandberg bluegrass with only a few scattered introduced annual species although scattered populations existed along the main routes into the area. Most perennial grasses and forbs are expected to survive, however a sagebrush seed source needs to be established within the burn area. Aerial seeding sagebrush would minimize soil disturbance while re-introducing a sagebrush seed source throughout the burn area based on priority. Not only does the designated PPH/PGH area provide important sage-grouse habitat, it also is mule deer winter

range, pygmy rabbit and big horn sheep habitat.

If no conflicting issues are identified, sagebrush seed would be applied to approximately a third of the proposed drill seeding treatment areas. This is dependent on rangeland drill availability as sagebrush seed requires a fluffy seed box. Sagebrush seed would be applied using rangeland drills which would be trailed by a cultipacker to compress the sagebrush seed into the soil surface. Currently, 33,751 acres of the total acreage to be drill seeded is projected to use this method. Sagebrush seed applied using a rangeland drill with a fluffy box will be applied at 2 lbs per acre.

B. How does the treatment relate to damage or changes caused by the fire?

Aerial seeding treatments are specifically targeted at stabilizing, protecting and rehabilitating and restoring the significant loss of sage-grouse and other sagebrush-obligate habitat. Every effort has been made to select and apply treatment methodologies to areas with the highest probability of jump-starting the restoration process for sagebrush and their related understory habitat. Seed mixes and seed selection is targeted at appropriate areas and sites, as determined by the best available soils, vegetation potential and staff expertise. While aerial application of sagebrush is not recognized as a high-success methodology, every effort to get sagebrush seed back onto the previous habitat for sage-grouse should be a priority.

Aerial Seeding:
The goal of the treatment is to stabilize the site with competitive perennial vegetation and minimize erosion in the long term. Soils within the burn area are primarily loamy and susceptible to wind erosion in the short term until vegetative cover is restored. The treatment would stabilize the site by preventing conversion to annual and undesirable species. The treatment area receives from 8 to 12” of precipitation annually. Similar treatments have been done successfully on numerous projects in the area with similar soils, vegetation and precipitation.

Aerial Seeding of Sagebrush Only:

Prior to the Long Draw fire most of the proposed treatment area contained stands of sagebrush with under stories of desired vegetative communities. The goal of the treatment is to allow recovering desirable vegetation to recover and minimize soil disturbance to reduce the chance of habitat conversion. After a landscape scale disturbance event like the Long Draw fire re-establishing sagebrush seed sources throughout the burn area will provide benefits to all sagebrush obligate species.

C. Why is the treatment/activity reasonable, within policy, and cost effective?

Aerial Seeding:
Treatments have been reviewed and are in conformance with the Southeastern Oregon Resource Management Plan (2002). The treatment area receives from 8-12" of precipitation annually. Treatment is cost and resource effective and would stabilize the site and minimize erosion in the long term. Costs are detailed in part 4 of this document. Monitoring will be conducted to determine whether the following objectives are reached. While drill seeding is the preferred method for planting seed, treatments within Wilderness Study Area (WSA) will be seeded aerially and incorporated in with a smooth chain in order to not impair the WSA's suitability criteria for Wilderness designation. Additionally, after contacting the national Rangeland Drill shop to ascertain the availability of drills, it was determined there would not likely be enough drills available to use on all of the proposed seedings. As an alternative, we are proposing the aerial/chain method in order to accomplish seeding within the short timeframe appropriate to put seed in the ground.

Aerial Seeding of Sagebrush Only:
Broadcast seeding is the most cost effective method for reestablishing sagebrush on a

landscape scale. Rehabilitating healthy shrub-steppe communities promotes sagebrush dependent species and other intrinsic benefits. Aerial seeding of sagebrush is not the sole sagebrush restoration activity proposed within this plan.

Treatments have been reviewed and are in conformance with the Southeastern Oregon Resource Management Plan (2002). The treatment area receives from 8 – 12" of precipitation annually. The treatment is cost and resource effective and would stabilize the site and restore wildlife habitat destroyed by the fire. Costs are detailed in part 4 of this document. Seeding within the burned area with a seed mix that includes sagebrush, would increase the connectivity of remaining sagebrush habitat and prevent the loss of sagebrush habitat. The general objective is the establishment twice the viable seed producing plants after 10 years compared to untreated areas within the burn.

Issue 4 - Critical Heritage Resources

S9 Cultural Protection (Stabilization/Patrol)

A. Treatment/Activity Description

Assessment of 43 known archaeological sites and documentation of fire effects. Conduct low impact seeding and installation of erosion control structures if necessary for stabilization purposes. Increase law enforcement patrols to deter unauthorized collection of artifacts from significant sites with increased visibility.

B. How does the treatment relate to damage or changes caused by the fire?

The Long Draw Fire burned 43 previously known cultural resources entirely or partially. All were eligible for inclusion to the National Register of Historic Places (NRHP) or their NRHP eligibility status was undetermined. Sites with undetermined NRHP eligibility status are afforded the same protection as sites evaluated as eligible according to the Protocol for Managing Cultural Resources on Lands Administered by the BLM in Oregon.

C. Why is the treatment/activity reasonable, within policy, and cost effective?

Patrol would take place in the spring and summer for the first three years until ground cover is re-established. This activity is considered reasonable and cost effective, because it is only being proposed within the burned area to stabilize previously known sites. Without stabilization measures, significant cultural resources could be damaged or lost by increased erosion or by vandalism and looting.

Issue 5 - Invasive Plants and Weeds

S5 Noxious Weeds

A. Treatment/Activity Description

Proposed invasive plant and weeds treatments are designed to aggressively limit expansion of invasive species known to exist in the area, and to minimize the potential to expand into: known sage-grouse and other sagebrush obligate species habitats, areas that are proposed for ground-based seedings wherein invasive species – particularly cheatgrass – may out-compete natives and other rehabilitation and/or stabilization seeding treatments, and to limit establishment of fire-prone species while other target species have the opportunity to establish.

Scotch thistle (Onopordum acanthium), Russian knapweed (Acroptilon repens), spotted knapweed (Centaurea maculosa), diffuse knapweed (Centaurea diffusa), yellow starthistle (Centaurea solstitialis), perennial pepperweed (Lepidium latifolium), whitetop species (Lepidium ssp), halogeton (Halogeton glomeratus) are located within the burn area. Rush skeletonweed (Chondrilla juncea) was found in an initial survey following the fire and a new invasive grass, ventenata (Ventenata dubia), was found in 2011. Noxious weed inventory and treatment would help to control existing populations, help discover new populations, and reduce the risk of further establishment of noxious weeds (see map 6). Aerial noxious weed treatment applied by a helicopter within the burned area would be done in the first year on the known site of Scotch thistle and rush skeletonweed (FY 2012) if funding can be secured in time to treat within proper biological/environmental windows, following the fire under stabilization. If fall of 2012 treatment can not be completed it would be conducted during the spring of 2013. In FY 2014 and FY 2015 the noxious weeds inventory and treatment would be included as a rehabilitation treatment, this is sometime referred to as Early Detection Rapid Response (EDRR). In FY 2015 inventory monitoring and spot treatment would continue. Chemical treatment of noxious weed populations, closing the area to livestock and seeding competitive perennial grasses would reduce the likelihood of their spread to new unoccupied areas and help to re-establish higher quality vegetation. Noxious weeds also threaten adjacent private range and agricultural lands. Furthermore, noxious weed infestations have little to no value to wildlife, wild horses or livestock and are considered one of the greatest threats to loss of sage grouse habitat.

considered one of the greatest threats to loss of sage grouse habitat.

B. How does the treatment relate to damage or changes caused by the fire?

Long term monitoring and a long history of land treatments in the burned area provide extensive experience on the probability of success of various treatments. Noxious weed and invasives in the burned area are well-understood and spatially identified. Fire has a high frequency return interval in the north end of the fire, which is now dominated by cheat-grass. Proposed treatments are targeted at limiting the expansion of invasives from the pre-fire extent to nearby burned areas of critical sage-grouse and other sagebrush obligate species habitat.

Noxious weeds are the first plants to reestablish following a wildfire and take advantage of the vulnerability of the fire-weakened and stressed desired species such as native forbs. For example, Scotch thistle rosettes were still green 2 weeks after the ignition date of the fire and dead looking stalks were sprouting new limbs with small buds; and rush skeletonweed is known to resprout and bloom within 8 weeks of being burned over by fire. The objective of the noxious weed treatment and survey is to continue treating previously known infestation sites and identify the spread of noxious weeds in the burned area. The identified weeds are present in the burned area and if not treated, are expected to increase due to the removal of existing vegetation by the Long Draw Fire. Past treatments in the area have been relatively successful and by continuing to inventory and treat infestation and introductory sites, the frequency of noxious weeds is expected to be reduced.

C. Why is the treatment/activity reasonable, within policy, and cost effective?

Proposed treatments are cost-effective in that expansion of known noxious weeds and invasives in the burned area significantly reduces the productivity of the vegetation, particularly with regard to sage-grouse and sagebrush obligate species habitat. Every effort was made in the proposed projects to efficiently select treatments that would have the greatest effectiveness, and to limit competition of invasives on proposed seeding and planting treatments.

Noxious weed treatments are completed in conjunction with the inventory (EDRR) for effective cost and time management. By continuing ongoing treatments and inventorying for introductory sites in the burned area, the treatment is reasonable and will maintain the success of previous treatments. Many of the noxious weeds present in the burned area require multiple treatments to effectively kill the species. A single treatment cannot control most species due to the length of seed viability on annuals and biennials. The vast root systems of perennials prevents the success expected from a single treatment. Additionally, these weeds may not express themselves in the ecosystem until a year or two after the fire. It is imperative that multiple years of inventory and treatment are completed post fire in order to increase success. All BLM personnel record and report new noxious weeds as they are found.

Issue 1 - Lands Unlikely to Recover Naturally

R4 Seedling Planting

A. Treatment/Activity Description

Sagebrush Seedling Planting:
In order to restore sagebrush for sage-grouse it is proposed to plant sagebrush plugs (see map 5) and/or bare root seedlings in key areas. This treatment would take place within a half mile of identified sage-grouse leks to restore sagebrush requirements in these critical areas. There are 26 leks that are located within the fire perimeter. If sagebrush plugs and/or bare seedlings were planted within a ½ mile of each lek which is approximately 500 acres at a rate of 15 seedlings per acre around 200,000 plugs and/or bare root seedlings would be required for this proposed treatment. Other sagebrush seed methods are being proposed as part of this plan. Depending on the availability of funding there is potential to collect locally adapted seed, grow out and plant sagebrush seedlings. The potential of using other program sources to cover the cost of collecting locally adapted seed exists if funding could be obtained to it grow out. There are various advantages of collecting locally adapted seed sources, but this avenue is more expensive than purchasing non-localized plugs and/or bare root seedlings. It is acceptable to plant seedlings, plugs and/transplant shrubs as block plantings on specific areas for shrub establishments. Planting of these seedlings will be a cost associated with this project regardless of if the plugs and/or bare root seedlings are grown out from locally adapted seed or purchased.

85,000 acres of PPH within the burned area is proposed to be seeded aerially in addition to other proposed focused treatments this is represent on map 5. This project is one of two focused treatments being proposed the other is sagebrush seed scattering.

Sagebrush Seed Scatter:
Locally adapted sagebrush seed will be scattered over approximately 54,000 acres of the burn area. This proposed treatment method will focus on areas of the burn around Blue Mountain on the west side of U.S. Highway 95 and from Ten Mile Rim to Battle Mountain on the east side of U.S. Highway 95. These areas contain a high concentration of sage-grouse leks, six and seven respectively. Introducing a sagebrush seed source into this area will aid in sagebrush establishment and improve the connectivity with existing sagebrush communities. Scattering will be done utilizing various methods depending on the terrain. By scattering sagebrush branches that contain seed from a locally adapted source near the burn area, it is expected that seedling establishment will be higher than using non-local sagebrush seed. Seed will be collected by selectively pruning branches with developed seed inflorescences, in October and early November, before seed is released. Pruning is expected to have little to no effect on plants. Branches containing seed will be cut and collected from areas adjacent to the burn and will be randomly distributed on the ground to provide a microsite to collect moisture and enhance germination. Approximately 10-20 branches will be scattered per acre across the treatment area.

B. How does the treatment relate to damage or changes caused by the fire?

Sagebrush Seedling Planting:
Prior to the Long Draw fire most of the proposed treatment area contained stands of sagebrush with under stories of desired vegetative communities. The goal of the treatment is to allow desirable vegetation to recover and minimize soil disturbance to reduce the chance of habitat conversion. After a landscape scale disturbance event like the Long Draw fire re-establishing sagebrush seed sources throughout the burn area will provide benefits to all

sagebrush obligate species. Most of the areas identified for focused sagebrush restoration treatments have not burned in recorded history prior to the Long Draw fire. Of the 558,198 acres burned in the Long Draw fire, fire records dating back to 1980 show that 448,508 acres of this fire (80%) have never burned. Sagebrush steppe communities are vulnerable to fire and most of the sagebrush habitat within the burned area is not anticipated to recover naturally, establishing islands of sagebrush to provide a seed source for future establishment of sagebrush is important after a landscape scale disturbance like the Long Draw fire. Only 3 of the 26 proposed treatment areas are not located with sage-grouse PPH.

Sagebrush Seed Scatter:

This treatment would address a key component of the shrub habitat that was lost in this fire. Most of the proposed treatment area is PPH for sage-grouse. A portion at the northern end of the Blue Mountain treatment area is located in PGH. This treatment area is designed to establish sagebrush islands within the burned area. This treatment would alleviate habitat lost to sagebrush obligate species including sage grouse, mule deer and big horn sheep. Most of the identified treatment area is at higher elevations which receive from 10-12” of precipitation annually. A similar treatment was successfully done on the Burns District in 2009.

C. Why is the treatment/activity reasonable, within policy, and cost effective?

Sagebrush Seedling Planting:

Fire records dating back to 1980 show that 25 of 26 leks proposed for treatment had never burned. Only 3 of the 26 proposed treatment areas are not located with sage-grouse PPH. Rather than using higher recommendations for plants per acre, it is proposed that only 15 seedlings will be planted per acre to reduce costs. If other treatments identified in this plan are implemented the likely hood of this treatment being resource and cost effective is good. Planting success is anticipated to be between 15% and 30% , based on past plantings on the Vale District.

Sagebrush Seed Scatter:
Sagebrush is one of the most crucial components of the sagebrush steppe for sagebrush obligate species. Given the current sagebrush seed shortage, this treatment in conjunction with planting of sagebrush plugs and/or bare root seedlings would improve sagebrush habitat by utilizing a locally adapted seed source that could be collected depending on seed availability. Due to current climatic conditions potentially affecting seed production and viability this treatment could be obligated during FY 2013, but not implemented until fall of 2014. Because sagebrush seed does not disperse long distances and natural establishment post fire requires a local seed source, this method in conjunction with seedling planting of plugs is thought to have the highest probability of success.

R13 Monitoring

A. Treatment/Activity Description

Effectiveness monitoring would be completed on identified stabilization activities within this plan using a variety of methods further detailed in the monitoring section of this plan, including but not limited to vegetation monitoring protocols.

including but not limited to vegetation monitoring protocols.

B. How does the treatment relate to damage or changes caused by the fire?

N/A

C. Why is the treatment/activity reasonable, within policy, and cost effective?

Monitoring of treatments is important to validate the success of each treatment.

Issue 2 - Weed Treatments

R5 Noxious Weeds

A. Treatment/Activity Description

General Weed Treatment:

Scotch thistle (Onopordum acanthium), Russian knapweed (Acroptilon repens), spotted knapweed (Centaurea maculosa), diffuse knapweed (Centaurea diffusa), yellow starthistle (Centaurea solstitialis), perennial pepperweed (Lepidium latifolium), whitetop species (Lepidium ssp), halogeton (Halogeton glomeratus) are located within the burn area. Rush skeletonweed (Chondrilla juncea) was found in an initial survey following the fire and a new invasive grass, ventenata (Ventenata dubia), was found in 2011. Noxious weed inventory and treatment would help to control existing populations, help discover new populations, and reduce the risk of further establishment of noxious weeds. Noxious weed inventory and treatment would help to control existing population and reduce the risk of further establishment of noxious weeds. Aerial noxious weed treatment within the burned area would be done in the first year on the known site of Scotch thistle and rush skeletonweed (FY 2012), if funding can be secured in time to treat within proper biological/environmental windows, following the fire under stabilization. If fall of 2012 treatment cannot be completed it would be conducted during the spring of 2013. In FY 2014 and FY 2015 the noxious weeds inventory and treatment would be included as a rehabilitation treatment, this is sometimes referred to as Early Detection Rapid Response (EDRR). In FY 2015 inventory monitoring and spot treatment would continue. Chemical treatment of noxious weed populations, closing the area to livestock and seeding competitive perennial grasses would reduce the likelihood of their spread to new unoccupied areas and help to re-establish higher quality vegetation.

Imazapic Treatment:
In the burned area there are a few isolated populations of the noxious weeds, medusahead (Taeniatherum caput- medusa) and ventenata (Ventenata dubia). These species and other non-native invasive weeds, including cheatgrass (Bromus tectorum), have potential for establishment within the burned area. 174 miles of roadside and dozer line treatment plus 2,000 acres of BLM land (see map 9) has been identified and proposed for aerial and ground based application of the herbicide Imazapic to prevent the spread and introduction of these weedy annual grasses. Imazapic is a selective herbicide that is effective in the control of invasive weedy grasses at a rate of 6-8 oz per acre, while having little to no effect on established perennial grasses as long as the label is followed. The herbicide would be a pre-emergence application that would target the invasive annual grasses as they germinate in the spring. Additional NEPA will need to be accomplished prior to application. Imazapic

would be applied aerially in the fall of 2014 after NEPA and the Pesticide Use Proposal are completed. Target areas are the road systems and additional areas where soil surface disturbance has recently occurred. Imazapic would be applied to 250 feet on either side of roads or dozer lines, equating to 10,500 acres. For non-linear areas, Imazapic would be applied to the disturbed area and a 500 foot swath around it, equating to approximately 2,000 acres. Areas that will be seeded in 2012 would not be treated with Imazapic. The summer of 2015 the application would be monitored for effectiveness.

B. How does the treatment relate to damage or changes caused by the fire?

General Weed Treatments:

Noxious weeds are the first plants to reestablish following a wildfire and take advantage of the vulnerability of the fire weakened and stressed desired species. For example, Scotch thistle rosettes were still green 2 weeks after the ignition date of the fire and dead looking stalks were sprouting new limbs with small buds and rush skeletonweed is known to resprout and bloom within 8 weeks of being burned over by fire. The objective of the noxious weed treatment and survey is to continue treating previously known infestation sites and identify the spread of noxious weeds in the burned area. The identified weeds are present in the burned area and if not treated, are expected to increase due to the removal of existing vegetation by the Long Draw fire. Past treatments in the area have been relatively successful and by continuing to inventory and treat infestation and introductory sites the frequency of noxious weeds is expected to be reduced.

Imazapic Treatment:
Perennial grasses and forbs burned in the fire are more likely to recover if they do not have to compete for resources with invasive annual grasses. Application of Imazapic would target the invasive annual grasses and allow the native and desirable perennial species to recover. Roadsides and dozer lines were chosen for treatment because they are major vectors for the introduction and spread of noxious weeds.

C. Why is the treatment/activity reasonable, within policy, and cost effective?

General Weed Treatments:

Noxious weed treatments are completed in conjunction with the inventory for effective cost and time management. By continuing ongoing treatments and inventorying for introductory sites in the burned area the treatment is reasonable and will maintain the success of previous treatments. Many of the noxious weeds present in the burned area require multiple treatments to effectively kill the species. A single treatment can not control most species due to the length of seed viability on annuals and biennials. The vast root systems of perennials prevents the success expected from a single treatment. Additionally these weeds may not express themselves in the ecosystem until a year or two after the fire. It is imperative that multiple years of inventory and treatment are completed post fire in order to increase success. All BLM personnel record and report new noxious weeds as they are found. Noxious weed treatments would be consistent with the guidelines set forth in the ESR handbook (1742-1, pages 34 – 35), the SoutheasternOregon Resource Management Plan and Record of Decision 2002, the Vale District Integrated Weed Control Plan EA (1989), and the Vegetation Treatments Using Herbicides on BLM Lands in Oregon FEIS and

ROD (2010).

Imazapic Treatment:
Ventenata and medusahead are located in isolated population within and adjacent to the fire boundary. The application of Imazapic will control the spread of these weedy annual grasses and greatly reduce the cost of treating populations if there were allowed to spread throughout the road system and start invading areas that pre-fire were considered to be primarily composed of desirable perennial vegetation. Inventory and treatment of new weed populations is more cost effective than waiting until the population has had opportunity to establish and spread.

The label for Plateau, a brand name for Imazapic, states that the herbicide may be used on rangelands to control undesirable vegetation in order to aid in the establishment of desirable rangeland vegetation following a fire.

Issue 4 - Repair/Replace Fire Damage to Minor Facilities

R7 Fence/Gate/Cattleguard

A. Treatment/Activity Description

Due to a large amount of previously unburned area consumed in the Long Draw fire most existing management fences (allotment and pasture boundaries) were constructed with wood posts for corners, braces and gates. The Jordan Field Office has not had time to adequately inventory the condition of existing fences after the fire. Due to fire intensity, staff field observations and suppression rehabilitation efforts, a majority of these structures were damaged in the fire and need to be repaired. It is estimated that 450 miles of existing interior fence will need to be repaired and 39 miles of fence along the State Highway 95

corridor (see map 3). The BLM goal is to accomplish the Highway corridor fence by end of FY 13. This estimate was prepared using information from the rangeland improvement project system (RIPS) and geographic information system (GIS) data in addition to staff knowledge. Allotment and pasture boundaries determined to be a boundary impassable to livestock (including rims and other geological features) were excluded from this estimate. Fence reconstruction would be constructed to BLM standards for wildlife. In addition to fences, numerous rangeland projects were located within the fire perimeter there is a concern about the condition of pipelines, troughs and wells. Trough estimates were determined based on pre-existing condition (metal, rubber tire or plastic) and geographic features potentially resulting in the funneling of fire (up canyons). It is conceivable that the above ground wiring in well systems were damaged by the fire. It is known that three wells were affected.

Additional wildlife projects were damaged in the fire. Eight wildlife guzzlers and associated exclosures were damaged by the Long Draw fire.. The wooden structure supporting the aprons and the tank of the guzzlers were damaged to various degrees depending on fire intensity. The entire apron must be disassembled to replace the damaged wooden frame. Damage to the metal (tin) aprons and gutters was not observed. Replacement of the tanks is

Damage to the metal (tin) aprons and gutters was not observed. Replacement of the tanks is also required on most of the guzzlers. The guzzler tanks were primarily made of fiberglass, the top and outside edges of the tank which provided structural integrity were above ground and exposed to fire. If the edge or top of the tank was damaged, the tank must be replaced. Oregon Department of Fish and Wildlife (ODFW) maintains a BLM guzzler on Blue Mountain and have requested funding (including flight time to fly in materials) for the reconstruction of this project.

B. How does the treatment relate to damage or changes caused by the fire?

The damages sustained to the affected rangeland projects were caused by the fire. These projects are proposed to be repaired to the pre-existing condition, with the exception of wooden fence structures. These structures will be built to specifications which will prevent future damage, for example a rock crib will be constructed to replace a pre-existing rock jack. Reconstruction and repair of existing range projects damaged by the fire would allow for future management of livestock grazing systems in place prior to the fire and help sustain the seeded areas after the closure is lifted.

C. Why is the treatment/activity reasonable, within policy, and cost effective?

This treatment is reasonable and cost effective because the reconstruction and repair of rangeland projects is needed because of damages sustained as a direct result of the fire. For administrative purposes the definition for reconstruction of a project is defined as "rebuilding an improvement after it has been damaged or has deteriorated to the point that repair constitutes more than half of the cost of new construction." Fences for livestock grazing administration are property of BLM and designed to conform to BLM manual handbook 1741-1 and are built to meet wildlife specifications. Maintenance responsibilities of projects generally fall to the permit holders, however events out of their control that would require them to fix fences damaged by the Long Draw fire could result in an unforeseeable economic hardship. Monitoring is detailed in part 8 of this document. Costs are detailed in part 4 of this document.

R11 Facilities

A. Treatment/Activity Description

Signs will be placed at the sites which had been previously identified; these locations are represented on a burned management structure map attachment. Signs will be replaced as stated in the Vale District Sign Plan.

B. How does the treatment relate to damage or changes caused by the fire?

The fire burned approximately 100 carsonite signs within Wilderness Study Areas (WSA) (See Map 8). Replacement of these signs is necessary for public safety and to ensure resource protection. Outside of WSA, cross country travel is permitted. Cross country travel is prohibited in WSA. Management of WSA is to be done in a manner which will not impair the suitability of such lands for preservation as wilderness. The placement of carsonite signs within WSA is a critical component in the management of such areas. The selected locations and placement of these signs are highly effective as they are in view to all

approaching traffic. Signs are all highly visible, concise and support safe, legal and orderly use on public lands. The selection of sign locations has been limited so that they do not lose their effectiveness.

C. Why is the treatment/activity reasonable, within policy, and cost effective?

Replacement of signs is critical to maintaining the wilderness values of the WSA. The BLM is required, as stated in the Bureau of Land Management Interim Management Policy, to maintain the wilderness values of each WSA so that the suitability for wilderness preservation of such lands must not be impaired. Cross country travel within WSA lands is prohibited. The replacement of these signs is imperative in the management of these lands. The replacement of these signs will communicate a very clear and direct message in notifying public land visitors where WSA are located on the ground and where the use of motorized vehicles is allowed and not allowed. Any proposal to replace a sign is using the same material and method for installation as done pre-fire. Materials are all durable under normal conditions.

PART 4 DETAILED TREATMENT COST TABLE

PART 5 - SEED LISTS

DRILL SEED

Species	Scientific Name	% PLS	PLS Seeds / sq. ft.	PLS Seeds / ac.	Seeds / lb (bulk)	Total Seeds / Acre (Bulk)	Drill Seedings (Acre)	Lbs / Acre	Total Lbs.	Cost / Lb	Total Cost
Siberian Wheatgrass, Vavilov II	Agropyron fragile	80.8%	5.72	249,163	206,000	308,561	24,843.0	1.2	30,060.0	$ 2.60	$96,887.70
Siberian Wheatgrass, P27	Agropyron fragile	80.8%	5.72	249,163	206,000	308,561	24,843.0	1.2	30,060.0	$ 1.60	$59,623.20
Russian Wildrye, Bozoisky	Psathyrostachys juncea	76.5%	5.71	248,728	162,600	325,134	24,843.0	1.5	38,009.8	$ 5.38	$267,310.68
Russian Wildrye, Bozoisky II	Psathyrostachys juncea	76.5%	5.71	248,728	162,600	325,134	24,843.0	1.5	38,009.8	$ 9.19	$456,614.34
Siberian Wheatgrass, P27	Agropyron fragile	80.8%	5.72	249,163	206,000	308,561	53,702.0	1.2	64,979.4	$ 1.60	$128,884.80
Siberian Wheatgrass, Vavilov	Agropyron fragile	80.8%	5.72	249,163	206,000	308,561	24,843.0	1.2	30,060.0	$ 1.67	$62,231.72
Siberian Wheatgrass, Vavilov II	Agropyron fragile	80.8%	5.72	249,163	206,000	308,561	53,702.0	1.2	64,979.4	$ 2.60	$209,437.80
Wyoming Big Sagebrush, Wyoming	Artemisia tridentata wyomingensis	16.0%	4.59	199,940	2,500,000	1,249,628	53,702.0	0.1	4,296.2	$ 7.57	$203,262.07
Russian Wildrye, Bozoisky	Psathyrostachys juncea	76.5%	4.29	186,872	162,600	244,278	53,702.0	1.2	61,757.3	$ 5.38	$433,375.14
Russian Wildrye, Bozoisky II	Psathyrostachys juncea	76.5%	4.29	186,872	162,600	244,278	53,702.0	1.2	61,757.3	$ 9.19	$740,282.07
Snake River Wheatgrass, Secar	Elymus wawawaiensis	85.0%	2.45	106,722	125,680	125,555	53,702.0	0.9	45,646.7	$ 2.14	$114,922.28
Bluebunch Wheatgrass, Anatone	Pseudoroegneria spicata spp. spicata	76.5%	3.32	144,619	125,680	189,045	53,702.0	1.2	61,757.3	$ 3.29	$265,019.37
Bottlebrush Squirreltail, Vale	Elymus elymoides	67.5%	1.5	65,340	192,000	96,800	53,702.0	0.3	18,258.7	$ 14.75	$396,052.25
TOTALS:			60.46	2,633,638	4,623,760	4,342,657		13.8		$ 66.96	$3,433,903.42

AERIAL SEED

Species	Scientific Name	% PLS	PLS Seeds / sq. ft.	PLS Seeds / ac.	Seeds / lb (bulk)	Total Seeds / Acre (Bulk)	Aerial Seedings (Acre)	Lbs / Acre	Total Lbs.	Cost / Lb	Total Cost
Bottlebrush Squirreltail, Vale	Elymus elymoides	67.5%	1.5	65,340	192,000	96,800	7,950.0	0.3	2,703.0	$ 14.75	$58,631.25
Snake River Wheatgrass, Secar	Elymus wawawaiensis	85.0%	4.9	213,444	125,680	251,111	7,950.0	1.7	13,515.0	$ 2.14	$34,026.00
Bluebunch Wheatgrass, Anatone	Pseudoroegneria spicata spp. spicata	76.5%	4.41	192,100	125,680	251,111	7,950.0	1.5	12,163.5	$ 3.29	$52,311.00
Bluebunch Wheatgrass, P7	Pseudoroegneria spicata spp. spicata	76.5%	4.41	192,100	125,680	251,111	7,950.0	1.5	12,163.5	$ 2.64	$41,976.00
Wyoming Big Sagebrush, Wyoming	Artemisia tridentata wyomingensis	16.0%	9.18	399,881	2,500,000	2,499,255	85,000.0	0.2	13,600.0	$ 7.57	$643,450.00
Wyoming Big Sagebrush, Wyoming	Artemisia tridentata wyomingensis	16.0%	9.18	399,881	2,500,000	2,499,255	7,950.0	0.2	1,272.0	$ 7.57	$60,181.50
Siberian Wheatgrass, Vavilov II	Agropyron fragile	80.8%	5.72	249,163	206,000	308,561	4,750.0	1.2	5,747.5	$ 2.60	$18,525.00
Siberian Wheatgrass, Vavilov	Agropyron fragile	80.8%	5.72	249,163	206,000	308,561	4,750.0	1.2	5,747.5	$ 1.67	$11,898.75
Siberian Wheatgrass, P27	Agropyron fragile	80.8%	5.72	249,163	206,000	308,561	4,750.0	1.2	5,747.5	$ 1.60	$11,400.00
Russian Wildrye, Bozoisky II	Psathyrostachys juncea	76.5%	5.71	248,728	162,600	325,134	4,750.0	1.5	7,267.5	$ 9.19	$87,305.00
Russian Wildrye, Bozoisky	Psathyrostachys juncea	76.5%	5.71	248,728	162,600	325,134	4,750.0	1.5	7,267.5	$ 5.38	$51,110.00
TOTALS:			62.16	2,707,690	6,512,240	7,424,594		12.1		$ 58.40	$1,070,814.50

SEEDLINGS

Seedling Species	Scientific Name	Acres of Seedlings planted.	# of Seedlings per Acre	Total # of Seedlings	Cost / Seedling	Total Cost
Wyoming Big Sagebrush, Wyoming	Artemisia tridentata wyomingensis	13,051.0	15	195,765	$ 1.25	$244,706.25
TOTALS:		13,051.0	15	195,765		$244,706.25

PART 6 - NATIVE/NON-NATIVE PLANT WORKSHEET

A. Proposed Native Plants in Seed Mixtures (Both ES & BAR Treatments)

1. Are the native plants proposed for seeding adapted to the ecological sites in the burned area?

Yes [X] No [ ] Rationale:

The native plants proposed for the seeding are adapted to the ecological sites within the burn area.

2. Is seed or seedlings of native plants available in sufficient quantity for the proposed project?

Yes [ ] No [X] Rationale:

The native seed proposed for seeding is relatively available on the open market. Given the abundance of fires in the Great Basin vegetation types there is an anticipated shortage for seed.

3. Is the cost and/or quality of the native seed reasonable given the project size and approved field unit management and Plan objectives?

Yes [X] No [ ] Rationale:

Although slightly more expensive than non-native seed the cost is reasonable.

4. Will the native plants establish and survive given the environmental conditions and the current or future competition from other species in the seed mix or from exotic plants?

Yes [X] No [ ] Rationale:

Seed germination and establishment is dependent on favorable environmental conditions which cannot be guaranteed. The sites proposed for seedings are in the 10-12" precipitation zone. Competition from annual species is a concern, but that previously had an overstory of sagebrush and a component of annual species are at a significant risk to total conversion to annual species is no treatment is implemented.

5. Will the existing or proposed land management practices (e.g. wildlife populations, recreation use, livestock, etc.) maintain the seeded native plants in the seed mixture when the burned area is re-opened?

Yes [X] No [ ] Rationale:

Livestock grazing would be excluded for two growing seasons or more from all seeded areas. Once established, these species would survive grazing as defined by the terms and conditions of grazing permits and as defined in allotment management plans.

B. Proposed Non-native Plants in Seed Mixtures (Both ES & BAR Treatments)

1. Is the use of non-native plants necessary to meet objectives, e.g., consistent with applicable approved field unit management plans?

Yes [X] No [ ] Rationale:

Non-native seeding is proposed to ensure establishment of plants that have the ability to compete with annual grasses that exist within and adjacent to the fire area. No restrictions exist that would preclude seeding of non-native species where proposed.

2. Will non-native plants meet the objective(s) for which they are planted without unacceptably diminishing diversity and disrupting ecological processes (nutrient cycling, water infiltration, energy flow, etc.) in the plant community?

Yes [X] No [ ] Rationale:

The non-native plants would aid the burn area in recovery by providing plants that would not diminish the diversity or disrupt ecological processes.

3. Will non-native plants stay on the site they are seeded and not significantly displace or interbreed with native plants?

Yes [X] No [ ] Rationale:

The non-native plants proposed will stay on sites they are seeded and do not displace or interbreed with native plants.

C. Proposed Seed Species - Native & Non-Natives (Both ES & BAR Treatments)

Non-native Plants	Native Plants
Bluebunch Wheatgrass, P7 (Pseudoroegneria spicata spp. spicata)	Bluebunch Wheatgrass, Anatone (Pseudoroegneria spicata spp. spicata)
Russian Wildrye, Bozoisky (Psathyrostachys juncea)	Bottlebrush Squirreltail, Vale (Elymus elymoides)
Russian Wildrye, Bozoisky II (Psathyrostachys juncea)	Snake River Wheatgrass, Secar (Elymus wawawaiensis)
Siberian Wheatgrass, P27 (Agropyron fragile)	Wyoming Big Sagebrush, Wyoming (Artemisia tridentata wyomingensis)
Siberian Wheatgrass, Vavilov (Agropyron fragile)	
Siberian Wheatgrass, Vavilov II (Agropyron fragile)	

PART 7 - COST-RISK ANALYSIS

A. Probability of Treatments Successfully Meeting Objectives

Action/ Spec #	Planned ES Action (LF20000ES)	Unit (acres, WMs, Number)	# Units	Total Cost	% Probability of Success
S2	Ground Seeding	Acres	78546	$12,602,000.00	85%
S3	Aerial Seeding	Acres	224235	$3,301,000.00	60%
S5	Noxious Weeds	Acres	50000	$221,000.00	90%
S6	Soil Stabilization (Other than seedling, planting)	Acres	2	$58,000.00	80%
S7	Fence/Gate/Cattleguard	Miles	81	$706,000.00	100%
S9	Cultural Protection (Stabilization/Patrol)	Each	2	$61,000.00	95%
S11	Facilities	Each	40	$60,000.00	100%
S12	Closures (area, OHV, livestock)	Each	3	$661,000.00	95%
S13	Monitoring	Acres	558198	$121,000.00	100%
				$17,791,000.00	

Action/ Spec #	Planned BAR Action (LF32000BR)	Unit (acres, WMs, Number)	# Units	Total Cost	% Probability of Success
R4	Seedling Planting	Acres	67000	$1,193,000.00	50%
R5	Noxious Weeds	Acres	2	$850,000.00	90%
R7	Fence/Gate/Cattleguard	Miles	350	$4,262,000.00	100%
R11	Facilities	Each	120	$165,000.00	100%
R13	Monitoring	Acres	558198	$41,000.00	100%
				$6,511,000.00	

B. Cost Risk Summary

1. Are the risks to natural resources and private property acceptable as a result of the fire if the following actions are taken?

Proposed Action Yes [X] No [ ] Rationale for Answer:

Recovery of residual perennial species, establishment of desirable native and non-native species on areas that were dominated by sagebrush and other species prior to the fire, and recruitment of shrub species back into this vegetation community would meet objectives to stabilize soils, restore ecological function, and limit fire intensity and spread with future ignitions. Construction of temporary fence and closure of the burn area would allow livestock to continue to graze within unburned portions of allotments/pastures, as well as provide adequate time for the burned area to recover. Seeding sagebrush would protect habitat for sagebrush obligate species. As a deep rooted shrub, sagebrush provides needed competion for noxious weeds within the burn area. Treatment of noxious weeds would keep weed populations from increasing.

No Action Yes [X] No [ ] Rationale for Answer:

No action would ensure that sites would see an increase in dominance by annual species which will result in loss of ecological function and increased fire frequency and a greater risk to life and property. The No Action alternative has a low probability of successfully stabilizing soils, preventing the spread of invasive and noxious plant species, and providing for the long-term health of the land. No Action may necessitate a livestock closrue on large unburned portions of allotments/pastures which will put additiional hardship on livestock operators. If

sagebrush is not planted there would be a loss of sagebrush habitat. Failure to treat weeds would result in larger infestations.

Alternative(s) Yes [ ] No [X] Rationale for Answer:

2. Is the probability of success of the proposed action, alternatives or no action acceptable given their costs?

Proposed Action Yes [X] No [ ] Rationale for Answer:

Weed control would be done by selective herbicide application and impacts to non-target vegetation are expected to be minimal and prevent spread of noxious weeds. Livestock closure and construction of temporary fence would allow livestock to continue to graze unburned areas within allotments/pastures while providing time for the burned areas to recover to it's pre-existing state. Seeding sagebrush in conjunction with grass seeding is an effective way to restore the sagebrush at minimal additional cost.

No Action Yes [X] No [ ] Rationale for Answer:

No Action would ensure that sites would have an increased dominance by annual species, resulting in loss of ecological function and increased fire frequency and an associated greater risk to life and property. The No Action alternative has a low probability of successfully stabilizing soils, preventing the spread of invasive and noxious weeds, and providing long-term health of the land. Not ensuring protection of the burn area from livestock grazing has a moderate to high risk of causing irretrievable and irreplaceable loss of soil resources by providing an opportunity for increased erosion to occur. In addition, the No Action alternative has a very high probability of irretrievable and irreplaceable loss of vegetation resources and subsequent invasion of non-native annual and noxious weed species. No Action would result in higher costs in the long-term due to the loss of native species and habitat for wildlife.

Alternative(s) Yes [ ] No [X] Rationale for Answer:

3. Which approach will most cost-effectively and successfully attain the objectives and therefore is recommended for implementation from a Cost/Risk Analysis standpoint?

Proposed Action [X]
Alternative(s) [ ]
No Action [ ]
Comments:
The proposed action is the most cost effective alternative in the long-term and meet the plan objectives. Seeding sagebrush would provide habitat for sagebrush obligate species.

C. Risk of Resource Value Loss or Damage

No Action - Treatments not Implemented

Resource Value	N/A	None	Low	Med	High
Unacceptable Loss of Topsoil				X	
Weed Invasion					X
Unacceptable Loss of Vegetation Diversity					X
Unacceptable Loss of Vegetation Structure					X
Unacceptable Disruption of Ecological Processes					X
Off-site Sediment Damage to Private Property			X		
Off-site Threats to Human Life		X			
Other-loss of Access Road Due to Plugged Culverts			X		

Proposed Action - Treatments Successfully Implemented

Resource Value	N/A	None	Low	Med	High
Unacceptable Loss of Topsoil			X		
Weed Invasion			X		
Unacceptable Loss of Vegetation Diversity			X		
Unacceptable Loss of Vegetation Structure			X		
Unacceptable Disruption of Ecological Processes			X		
Off-site Sediment Damage to Private Property			X		
Off-site Threats to Human Life		X			
Other-loss of Access Road Due to Plugged Culverts			X		

PART 8 - MONITORING PLAN

S2 - Ground Seeding

Identify the objective of the treatment:

The objectives of the drill seedings is to prevent erosion by reducing bare ground and establishing desirable perennial vegetation. The specific monitoring objectives to determine success is by the end of the third growing season following implementation of the seedings the density of perennial seeded species is at least 1.5 plants per square meter.

Describe how implementation will be monitored:

Implementation would be monitored by site visits of treated areas to ensure treatments are applied as specified in this plan.

Describe how effectiveness will be monitored, how it will be measured, and within what time period:

Effectiveness would be monitored annually at the appropriate time to measure seed production, percent bare ground, and perennial plant frequency through site visits using a variety of methods, including but not limited to vegetation monitoring protocols (FIREMON, USGS protocols, etc.). The study plots consist of 3 separate 50 meter transects radiating from a central hub. Each transect would consist of 50 points (at 1 meter intervals) in which plant cover is sampled using a vertically place pin. Density of desirable perennial grasses, shrubs, and forbs would be gathered using a 1 meter by 1 meter frame spaced a 5 meter intervals along each transect. Ten total plots would be read along each transect. Density of sagebrush will be determined by counting the number of live sagebrush plants along a 6 meter by 50 meter transect.

S3 - Aerial Seeding

Identify the objective of the treatment:

The objectives of the aerial seedings, seperate from the sagebrush only aerial seeding, is to prevent erosion by reducing bare ground and establishing desirable perennial vegetation. The specific monitoring objectives to determine success are: 1) by the end of the third growing season following implementation of the seedings the density of perennial seeded species is at least 1.5 plants per square meter. The objective of the sagebrush application treatments is by the end of the third growing season there is 1.5 live sagebrush plants per 50 square meters.

Describe how implementation will be monitored:

Implementation would be monitored by site visits of treated areas to ensure treatments are applied as specified in this plan.

Describe how effectiveness will be monitored, how it will be measured, and within what time period:

Effectiveness would be monitored annually at the appropriate time to measure seed production, percent bare ground, and perennial plant frequency through site visits using a variety of methods, including but not limited to vegetation monitoring protocols (FIREMON, USGS protocols, etc.). The study plots consist of 3 separate 50 meter transects radiating from a central hub. Each transect would consist of 50 points (at 1 meter intervals) in which plant cover is sampled using a vertically place pin. Density of desirable perennial grasses, shrubs, and forbs would be gathered using a 1 meter by 1 meter frame spaced a 5 meter intervals along each transect. Ten total plots would be read along each transect. Density of sagebrush will be determined by counting the number of live sagebrush plants along a 6 meter by 50 meter transect.

S5 - Noxious Weeds

Identify the objective of the treatment:

The objective of the weed treatments is to prevent the increase of existing weed populations and the establishment of additional noxious weed species within the burn area until desirable vegetation can re-establish. Initial treatment should kill and/or control from 80-90% of targeted weed populations, depending upon the type of weed and/or density of the infestation. Retreatment by spot spraying on remaining weeds will also be completed under R5.

Describe how implementation will be monitored:

Implementation would be monitored by site visits of treated areas by a COR/PI.

Describe how effectiveness will be monitored, how it will be measured, and within what time period:

Effectiveness would be monitored by site visits to treated areas. Noxious weed infestations are generally small and widely scattered, therefore effectiveness in most cases would be measured by presence or absence of weeds. However, treatment effectiveness on larger infestations would be determined either by stem counts or stand density. Weed treatments would be monitored on a timetable commensurate with the type of chemical used for treatment.

S6 - Soil Stabilization (Other than seedling, planting)

Identify the objective of the treatment:

The objective of the treatments would be to limit erosion at selected areas within the burned area to no greater than 20 percent of areas outside the burned area. These areas are yet to be determined. Likely areas are where roads enter drainages, or erosive slopes above and below roads, or erosive slopes which could contribute large amounts of sediment into drainages.

Describe how implementation will be monitored:

Nail and washer grid plots will be established at the head, middle and toe of the slopes in selected areas of similar characteristics (soil type, % slope, aspect) inside and outside the burn area. Plots will be monitored yearly at the end of the water year (generally My to

June) to determine if and how much erosion has occurred at the sites. This can be determined by measuring the distance the top of the wather is from the bottom of the head of the nail and assuming this to be the amount removed from the site.

Describe how effectiveness will be monitored, how it will be measured, and within what time period:

Effectiveness will be determined by comparison of the plots inside and outside of the burned area. It will be measured by the amount/percent of sediment trans-located. This will continue for a period of 3-5 years and beyond contingent on funding.

S7 - Fence/Gate/Cattleguard

Identify the objective of the treatment:

The objective of the temporary fence treatment and livestock closure is to protect the burn area from grazing impacts to allow recovery of vegetative resources. The fencing would allow for site recovery while maximizing protection of soil and vegetative resources. The protective fence would be removed when adequate recovery of resources is achieved. The specific objective is that in the third year following treatment that herbaceous vegetation is 80% similar to preburn conditions based on ESI or Rangeland Health Assessment data.

Describe how implementation will be monitored:

Implementation would be monitored by staff and project inspectors to ensure fence is constructed as specified.

Describe how effectiveness will be monitored, how it will be measured, and within what time period:

Project inspector will monitor fences to assure they are within the specifications of the contract.

S9 - Cultural Protection (Stabilization/Patrol)

Identify the objective of the treatment:

The objective is to stabilize cultural resources within the burned area.

Describe how implementation will be monitored:

Cultural resource specialists will inspect projects once they are implemented.

Describe how effectiveness will be monitored, how it will be measured, and within what time period:

Site visits will be conducted within three years of implementation to determine whether or not further degradation of sites occurred.

S11 - Facilities

Identify the objective of the treatment:

The objective of posting signs at road and dozer line intersections is to prevent further degradation of lands, allow recovery of vegetation on dozer lines, and provide for public safety.

Describe how implementation will be monitored:

Implementation will be monitored by site visits to ensure signs are placed at appropriate locations.

Describe how effectiveness will be monitored, how it will be measured, and within what time period:

Effectiveness will be monitored by site visits periodically throughout the year. Visual inspection of dozer line will be completed to determine whether or not signs are dissuading vehicle traffic.

S12 - Closures (area, OHV, livestock)

Identify the objective of the treatment:

The objective of the closures is to protect the burn area from adverse resource impacts from livestock and public land users and to allow for recovery of vegetative resources.

Describe how implementation will be monitored:

Implementation will be monitored through site visits to determine if fences, structures, or barriers are in place and not being compromised.

Describe how effectiveness will be monitored, how it will be measured, and within what time period:

Effectiveness will be monitored in conjunction with monitoring for vegetation recovery. Site visits would also be conducted by BLM personnel to determine if violations of the closure are occurring. If violations are observed appropriate action will be taken. Monitoring will occur until closures are lifted. During site visits the ability of the closure device or fence will be evaluated for its ability to prevent entry or exit in the case of animals. If OHV tracks indicate traffic can still access a closed area that will constitute an ineffective device. Closure is effective when no egress or access can be observed, otherwise it is a fail and needs to be changed. This evaluation will guide the annual repair and re-establishment of other devices that may be found to be an effective deterrent to access. This monitoring will occur until resources are deemed recovered or the access to and from an area is no longer noted.

S13 - Monitoring

Identify the objective of the treatment:

The objective of monitoring is to determine whether each treatment was implemented as planned and whether or not each treatment was effective in accomplishing the objectives.

Describe how implementation will be monitored:

Implementation will be conducted annually for three years and documented in monitoring summary reports.

Describe how effectiveness will be monitored, how it will be measured, and within what time period:

A description of monitoring methods for each treatment are discussed under each specific treatment.

R4 - Seedling Planting

Identify the objective of the treatment:

The objective of the seedling planting treatment is to establish a seed source for sagebrush around identified sage grouse leks. The specific objective is by the end of the third year following planting that 15-30% of the seedlings are surviving per site.

The objective of the sagebrush seed scatter treatment is to re-establish sagebrush in Greater sage grouse PPH. The specific objective is have twice the number of sagebrush plants on the seeded area compared to the unseeded area within ten years.

Describe how implementation will be monitored:

Implementation would be monitored by site visits of treated areas to ensure treatments are applied as specified in this plan. The BLM will establish photo points and density belt transects that will be monitored annually.

Describe how effectiveness will be monitored, how it will be measured, and within what time period:

Effectiveness would be monitored annually through site visits. Live plants would be counted and compared to number of plants planted to determine the survivability of the seedlings. The number of live plants will be counted along the established transects and that number of plants will be divided by the number of acres the transect represents. The results will be compared to the objective of twice the number of plants compared to non-treated areas.

R5 - Noxious Weeds

Identify the objective of the treatment:

The objective of the weed treatments is to prevent the increase of existing weed populations and the establishment of additional noxious weed species within the burn area until desirable vegetation can re-establish. Initial treatment should kill and/or control from 80-90% of targeted weed populations, depending upon the type of weed and/or density of the infestation.

Describe how implementation will be monitored:

Implementation would be monitored by site visits of treated areas by a COR/PI. during the contract period when treatment is conducted. Record of chemical used, rate of application and other PUP required information would be recorded for submission to the State Weed

Coordinator at the end of the contract period. Any treatment by BLM crews or personel will be likewise recorded and submitted.

Describe how effectiveness will be monitored, how it will be measured, and within what time period:

Effectiveness would be monitored by site visits to treated areas. Noxious weed infestations are generally small and widely scattered, therefore effectiveness in most cases would be measured by presence or absence of weeds. However, treatment effectiveness on larger infestations would be determined either by stem counts or stand density. Weed treatments would be monitored on a timetable commensurate with the type of chemical used for treatment.

R7 - Fence/Gate/Cattleguard

Identify the objective of the treatment:

The objective of this treatment is to repair/replace damaged fences, gates, and cattleguards.

Describe how implementation will be monitored:

Implementation would be monitored by Rangeland Management Specalist or Rangeland Technician to ensure fence is constructed as specified.

Describe how effectiveness will be monitored, how it will be measured, and within what time period:

Effectiveness will be monitored by range specialists during normal allotment inspections upon resumption of grazing activities.

R11 - Facilities

Identify the objective of the treatment:

The objective of this treatment is to repair/replace directional and information signs within the burn area which aid in public safety and enjoyment of land users.

Describe how implementation will be monitored:

Implementation will be monitored by site visits to ensure signs are placed at appropriate locations.

Describe how effectiveness will be monitored, how it will be measured, and within what time period:

Effectiveness will be monitored by site visits periodically throughout the year.

R13 - Monitoring

Identify the objective of the treatment:

The objective of monitoring is to determine whether each treatment was implemented as planned and whether or not each treatment was effective in accomplishing the objectives.

Describe how implementation will be monitored:

Implementation will be conducted annually for three years and documented in monitoring summary reports.

Describe how effectiveness will be monitored, how it will be measured, and within what time period:

A description of monitoring methods for each treatment are discussed under each specific treatment.

PART 9 - MAPS

PART 10 - REVIEW, APPROVALS, and PREPARERS

TEAM MEMBERS

Position	Team Member (Agency/Office)	Initial	Date
Team Leader	Bill Lutjens (BLM Vale District)	Initialed	08/07/2012
Team Leader/Botanist	Susan Fritts (BLM Vale District)	Initialed	08/07/2012
Natural Resource Specialist (Soil/Air/Water)	Linus Meyer (BLM Vale District)	Initialed	08/07/2012
Cultural Resources/Archeologist	Don Rotell (BLM Vale District)	Initialed	08/07/2012
Rangeland Mgt. Specialist	Marcy Egger (BLM Vale District)	Initialed	08/07/2012
Rangeland Mgt. Specialist	Bill Reimers (BLM Vale District)	Initialed	08/07/2012
Natural Resource Specialist (Fisheries/Wildlife Biologist)	Garth Ross (BLM Vale District)	Initialed	08/07/2012
Wild Horse & Burro Specialist	Shaney Rockefellar (BLM Vale District)	Initialed	08/07/2012
Outdoor Recreation Planner	Josh Travers (BLM Vale District)	Initialed	08/07/2012
Noxious & Invasive Species Specialist	Lynne Silva (BLM Vale District)	Initialed	08/07/2012
Fire Management Specialist	Brian Watts (BLM Vale District)	Initialed	08/07/2012
NEPA Compliance & Planning/GIS Specialist	Brent Grasty (BLM Vale District)	Initialed	08/07/2012
ES&R Plan Writer/Editor	Aimee Huff (BLM Vale District)	Initialed	08/07/2012

PLAN APPROVAL

The Agency Administrator is responsible for developing, implementing, and evaluating emergency stabilizations and rehabilitation plans, treatments and activities. 620 DM 3.5C

FIELD OFFICE MANAGER

9/7/12
DATE

FUNDING APPROVAL

The funding of ES treatments is approved through the appropriate administrative approval level in coordination with the National Office Budget Shop. As funding is available, ES funding requested within a plan that totals below $100,000 may be approved by the State Director, while ES funding of $100,000 and above must be approved by the WO. If the ES funding cap is reached, all ES funding will be approved through the National Office in coordination with State ES&R Coordinators to determine highest priority projects. Funding of all BAR treatments is accomplished through a scoring process and is dependent on accurate entries into NFPORS. All funding is approved and allocated on a year-by-year basis.

Legend

- Long Draw Fire
- Vale District
- State of Oregon

N W E S

0 30 60 120 Miles

0 50,000 100,000 200,000 Meters

U.S. Department of Interior
Bureau of Land Management

Vale District

August 5, 2012

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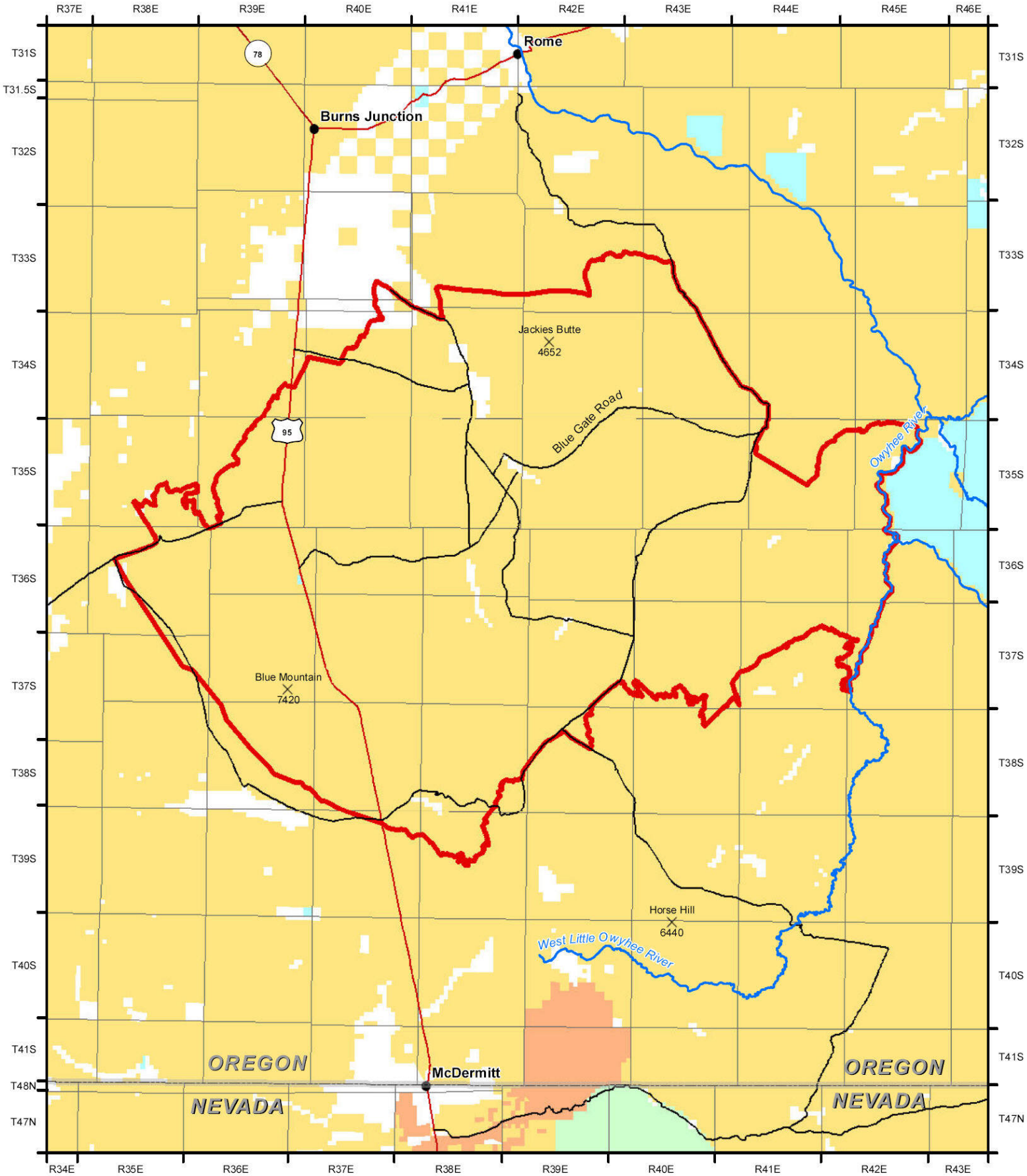
Map 1
Long Draw Fire Location
Long Draw Fire - Emergency Stabilization & Rehabilitation



Legend

- Long Draw Fire Perimeter
- Primary Routes
- State Boundary
- BLM - 550,200 Acres
- Other Federal Lands
- Bureau of Indian Affairs
- U.S. Forest Service
- Private - 7,750 Acres
- State Lands - 220 Acres

0 3.75 7.5 15 Miles

0 6,250 12,500 25,000 Meters

N W E S

OREGON

U.S. Department of Interior
Bureau of Land Management

Vale District

August 5, 2012

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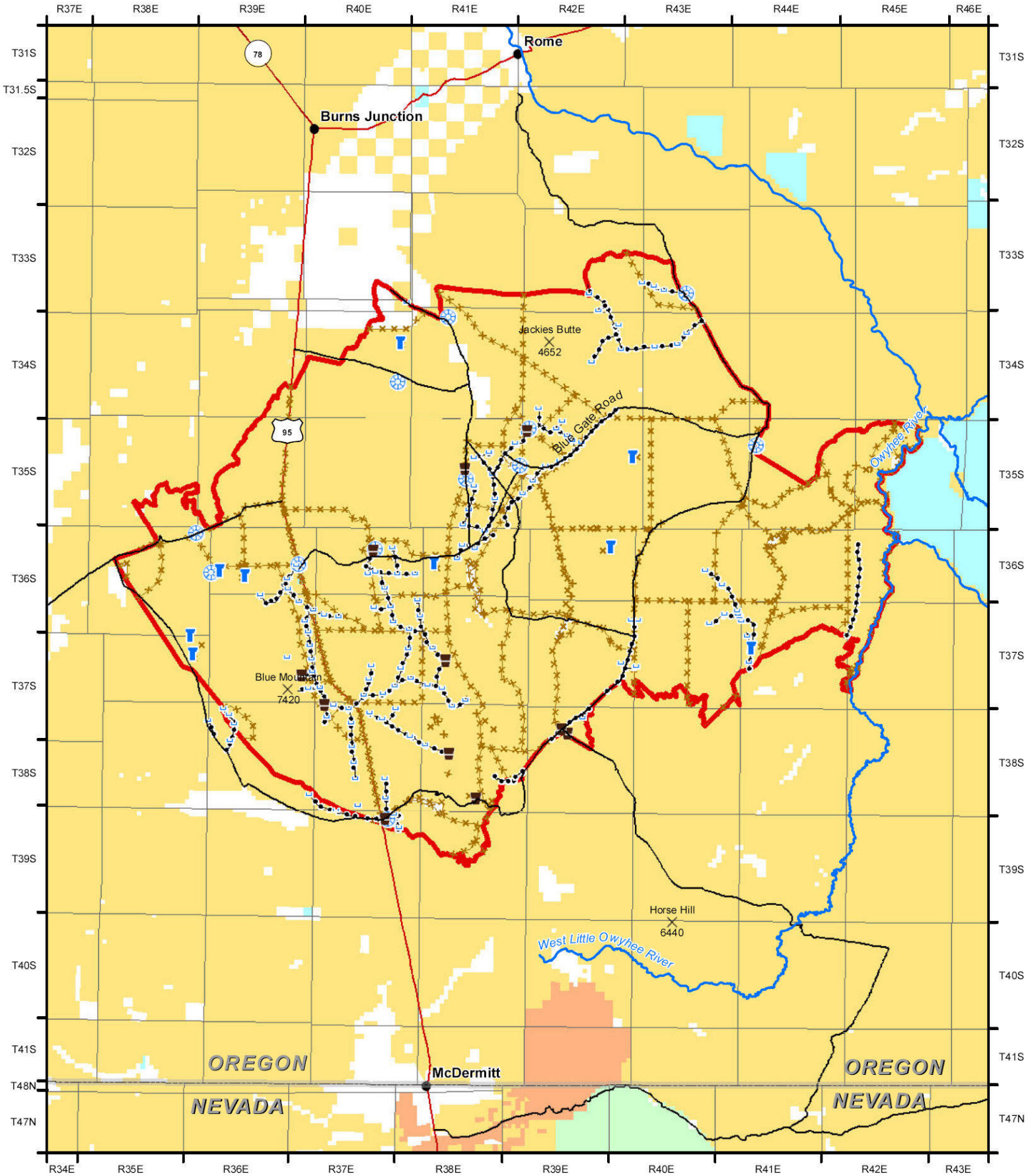
Map 2
Ownership
Long Draw Fire - Emergency Stabilization & Rehabilitation



Legend

- Long Draw Fire Perimeter
- Information and Directional Signs
- Wells
- Troughs
- Pipelines
- Wildlife Guzzlers
- Interior Fencelines

N W E S

0 3.75 7.5 15 Miles

0 6,250 12,500 25,000 Meters

OREGON

U.S. Department of Interior
Bureau of Land Management

Vale District

August 5, 2012

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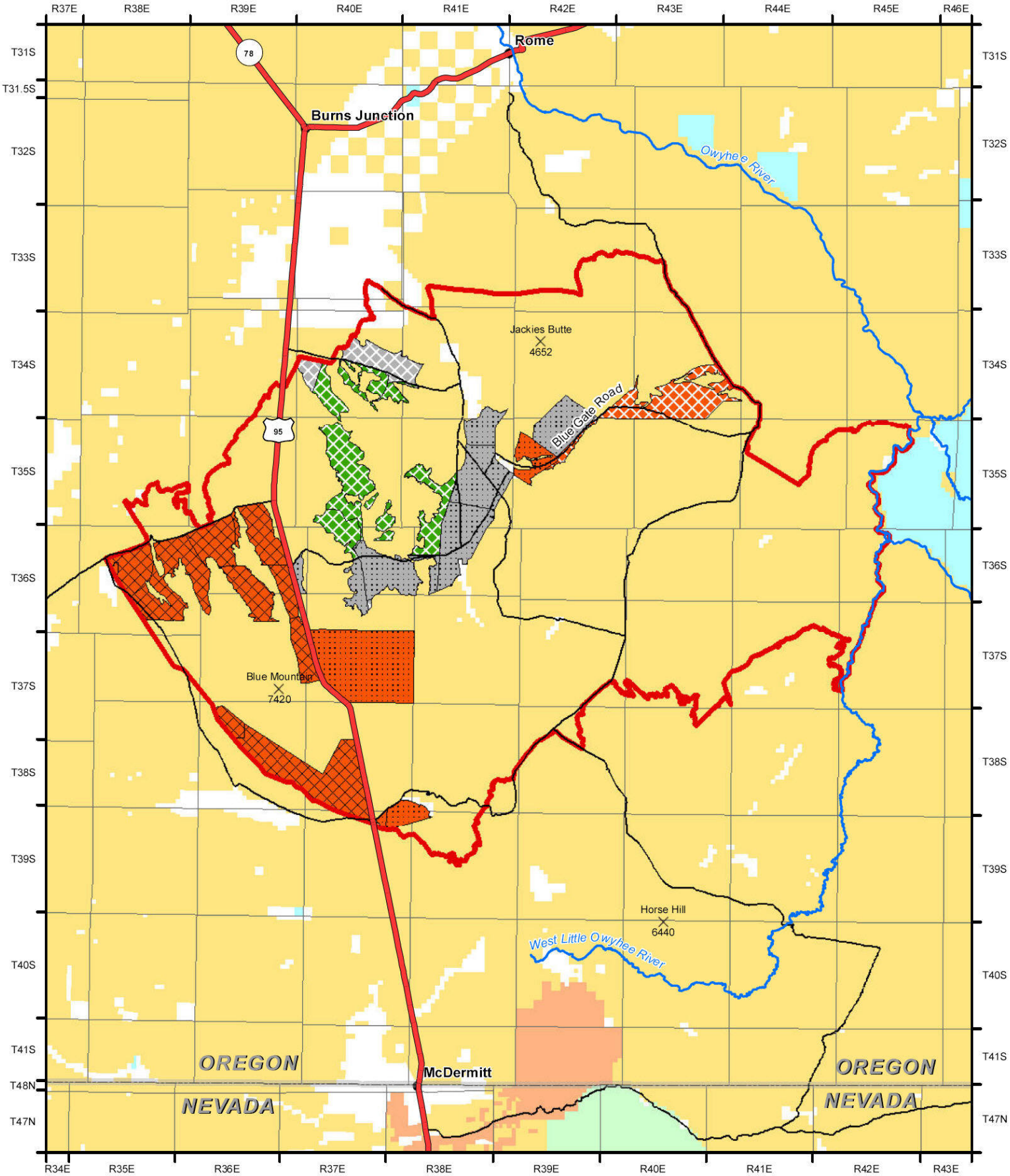
Map 3
Repair of Minor Facilities
Long Draw Fire - Emergency Stabilization & Rehabilitation



Legend

- Long Draw Fire Perimeter

Seeding Method

- Aeiral Seed and Chain
- Drill
- Drill - Modified

Ground Based Application Seed Mix

- Non-native Species
- Mixed Native & Non-Native
- Native Species

N W E S

0 3.75 7.5 15 Miles

0 6,250 12,500 25,000 Meters

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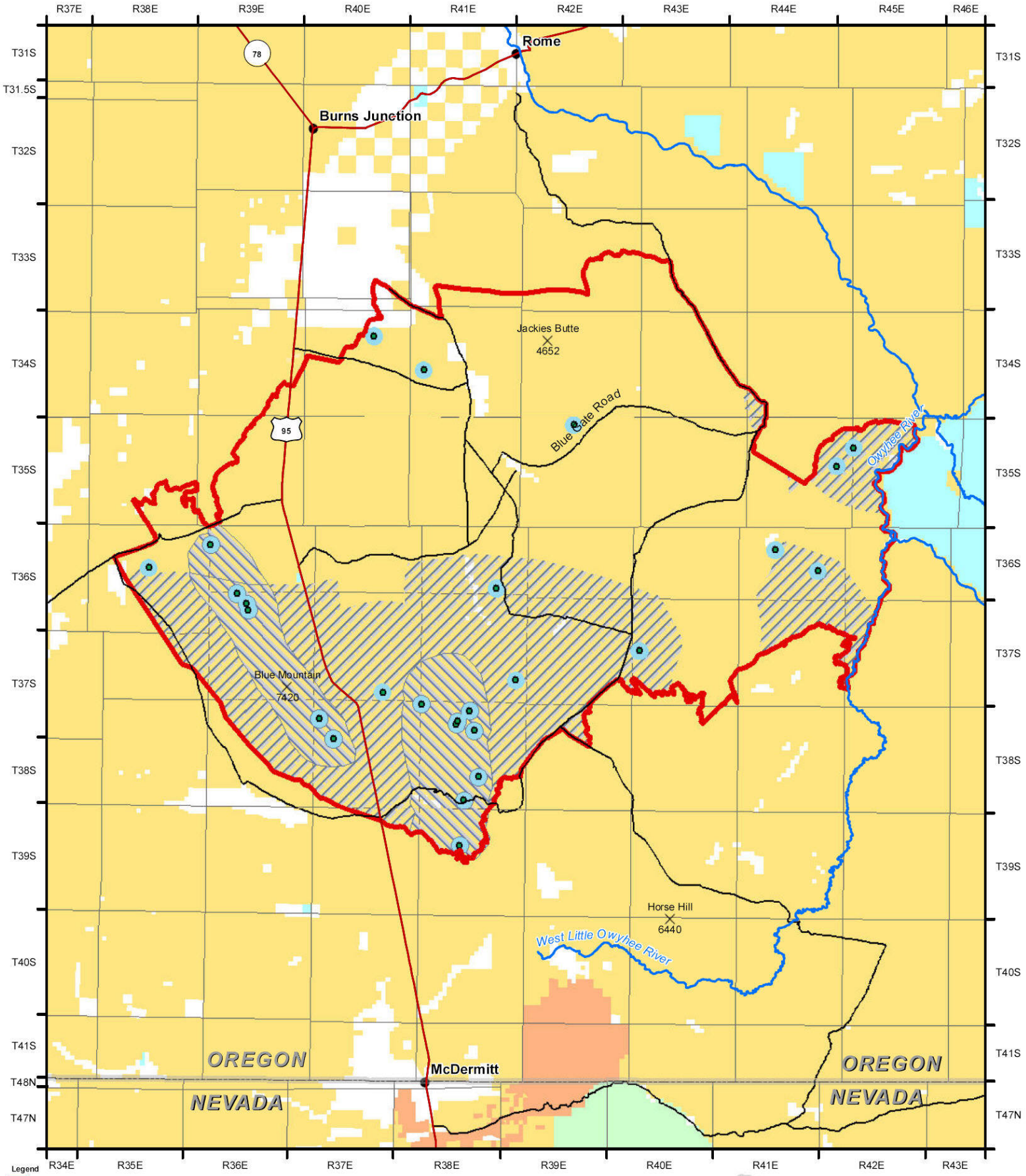
Map 4
Herbaceous Seed Mix and Treatment Method
Long Draw Fire - Emergency Stabilization & Rehabilitation



Legend

- Long Draw Fire Perimeter
- Recorded Sage-grouse Lek Locations
- Planting
- Aerial and/or Scatter Seed
- Collect and Scatter Seed

0 3.75 7.5 15 Miles

0 6,250 12,500 25,000 Meters

N W E S

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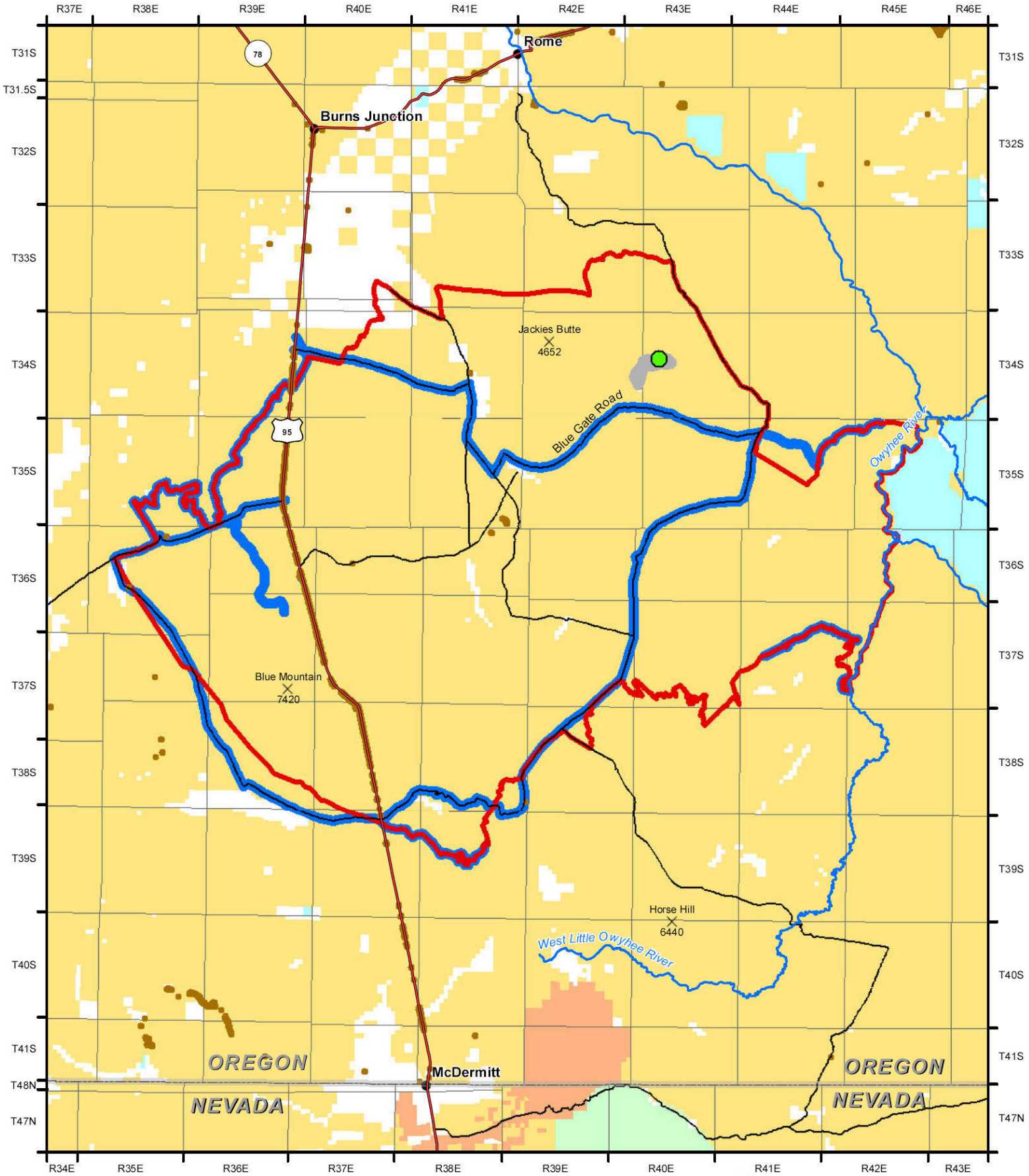
Note: All public lands outside of priority sage brush treatments shown above will be aerial seeded as funding and seed are available.

Map 5
Proposed Sage Brush Seed Application and Planting
Long Draw Fire - Emergency Stabilization & Rehabilitation



Legend

- Long Draw Fire Perimeter
- Rush Skeletonweed
- Scotch thistle
- Noxious and Invasive Weeds
- Imazapic Treatments

N W E S

0 3.75 7.5 15 Miles

0 6,250 12,500 25,000 Meters

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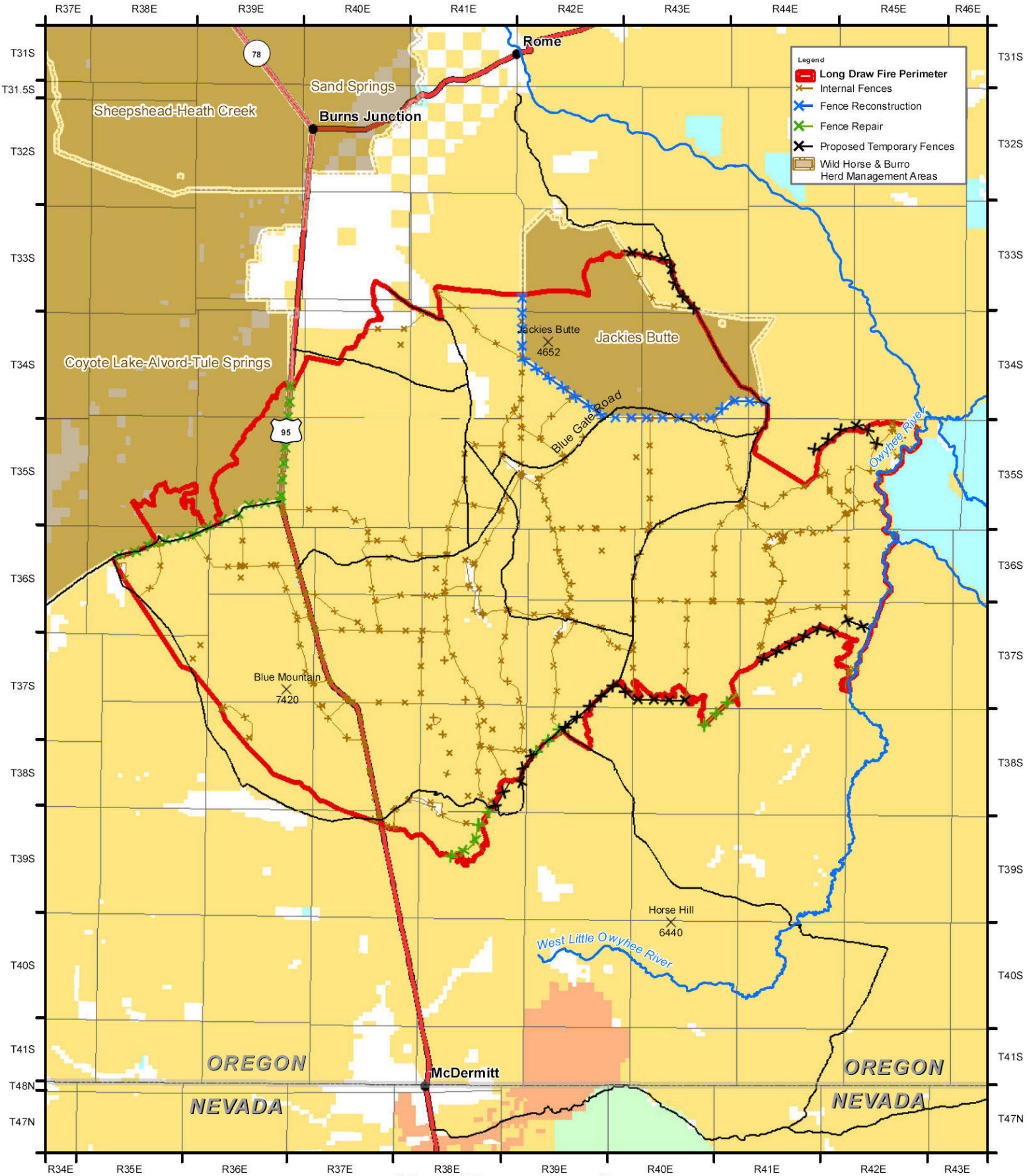
Map 6

Recorded Noxious Weed Locations and Proposed Herbicide Applications

Long Draw Fire - Emergency Stabilization & Rehabilitation



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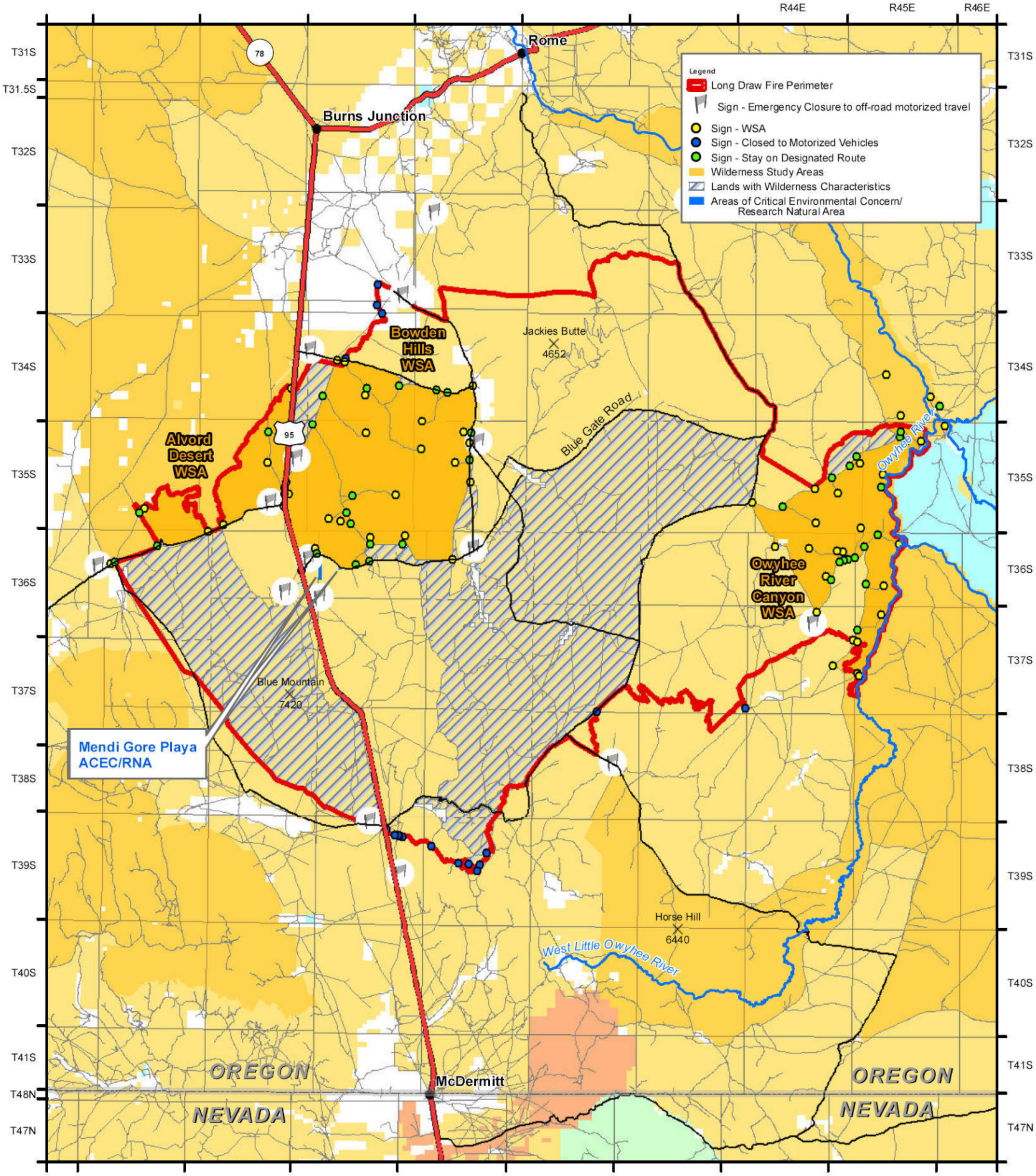
Map 7
Protective Temporary Fences/Related Facilities Repair
Long Draw Fire - Emergency Stabilization & Rehabilitation



N
W E

0 3.75 7.5 15 Miles

0 6,250 12,500 25,000 Meters

Map 8 - WSAs, ACECs, Lands with Wilderness Character and Sign Replacement
Long Draw Fire - Emergency Stabilization & Rehabilitation

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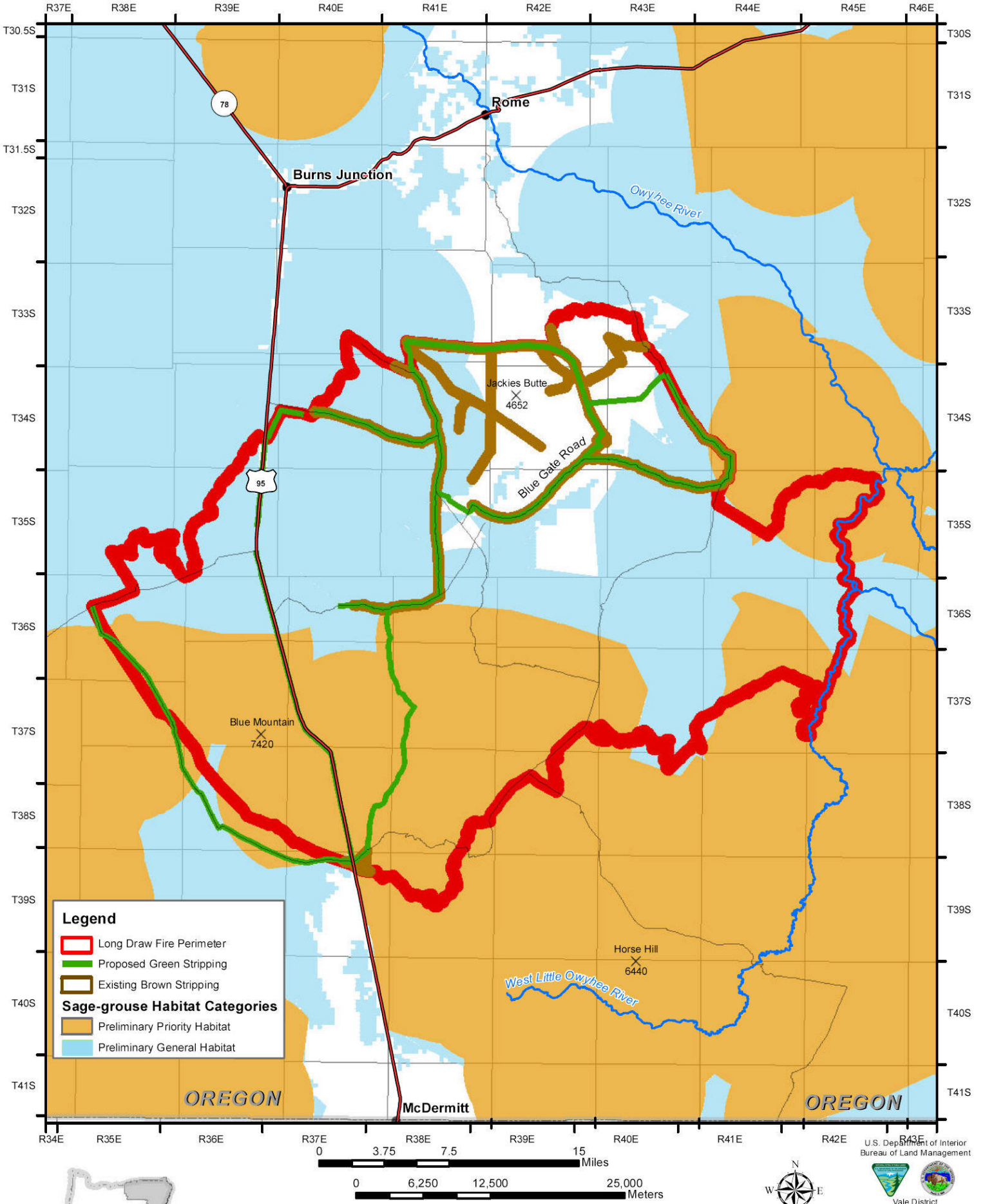

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Map 9 - Sage Grouse Habitat and Protection Actions
Long Draw Fire - Emergency Stabilization & Rehabilitation