Vale District Bureau of Land Management
Lincoln Bench II Emergency Stabilization and Rehabilitation Plan
Environmental Assessment
EA No. OR-030-02-025

Decision Record

This Decision Record documents my decision to select the proposed alternative for implementation of the Lincoln Bench II Emergency Stabilization and Rehabilitation Plan. This action was analyzed in the attached Environmental Assessment (EA OR-030-02-025). This proposed action is tiered to and is consistent with the Northern Malheur Management Framework Plan dated March 1983, the Southern Malheur Rangeland Program Summary dated January 1984, the Malheur County Land Use Plan, and BLM policy. Additionally, it is consistent with the proposed alternative of the Proposed Southeastern Oregon Resource Management Plan and Final Environmental Impact Statement dated April 2001.

My decision is to implement actions to seed native and nonnative seed mixes to restore perennial species to areas burned during the June 2002 fire and to construct and maintain temporary fencing to protect burned and rehabilitated areas from livestock grazing.

/s/ Tom Dabbs — 9/9/2002

Tom Dabbs
Field Manager
Malheur Resource Area

Date

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Finding of No Significant Impact

The Malheur Resource Area of the Bureau of Land Management, Vale District has analyzed a proposal to seed native and nonnative seed mixes to restore perennial species to areas burned during the June 2002 Lincoln Bench II Fire and to construct and maintain temporary fencing to protect burned and rehabilitated areas from livestock grazing.

Based on the following summary of consequences and as discussed in the environmental assessment, I have determined that the proposed action will best meet resource management objectives defined in the Northern Malheur Management Framework Plan and the Southern Malheur Rangeland Program Summary, both of which constitute the land use plan for Malheur Resource Area.

- Seeding a native mix to approximately 200 acres on Lincoln Bench burned and seeded to natives in 1999 and again burned during the 2002 Lincoln Bench II Fire would increase the dominance of desirable cultivars of native species. These species, including shrub species, would provide perennial ground cover and rooting to stabilize soils from wind and water transport. Additionally, establishment of desirable perennial species dominance which includes shrub species would more fully occupy the soil profile limiting the spread and invasion of weedy and noxious species. Thirdly, establishment of perennial herbaceous species would provide a more stable forage base within these arid rangelands to support wildlife habitat .

- Control of annual species through herbicide application prior to seeding of nonnative species on approximately 70 acres adjacent to Lytle Boulevard, in addition to the depletion of seed reserves which occurred from the 1999 and 2002 fires, would increase opportunities to establish dominance of desirable perennial species in an area previously dominated by weedy annual species. These species, including shrub species, would provide perennial ground cover and rooting to stabilize soils from wind and water transport. Additionally, establishment of desirable perennial species dominance which includes shrub species would more fully occupy the soil profile limiting the spread and invasion of weedy and noxious species. Thirdly, establishment of perennial herbaceous species would provide a more stable forage base within these arid rangelands to support wildlife habitat .

- Temporary exclusion of livestock grazing to allow recovery of desirable plant species which survived the fire and to allow establishment of seeded species would improve opportunities to maximize the success of seeding treatments and to facilitate the recovery of surviving perennial species. Retention of unburned portions of Lincoln Bench Pasture available for livestock grazing

as authorized by permit would avoid unnecessary impacts to affected livestock operators and the local farming/ranching economy.

- Short-term negative impacts to desired perennial vegetation communities and thus watershed stability are diminished by the long-term benefits to these resource values and indirect benefits to wildlife habitat, support of local economic enterprises, and amenities.

- Impacts to critical elements of the human environment, including ten points of significance identified in 40 CFR 1508.27(b), are not determined to be in excess of limits requiring the development of an environmental impact statement.

Additionally, management direction provided in the selected proposed action alternative is more consistent with the resource management direction proposed in the soon to be completed Southeastern Oregon Resource Management Plan as compared to other alternatives analized.

Thus, on the basis of the information contained in this environmental assessment and all other information available, it is my determination that the proposed action does not constitute a major federal action significantly affecting the quality of the human environment and that an environmental impact statement is not required.

/s/ Tom Dabbs — 8/16/2002

Tom Dabbs — Date
Field Manager
Malheur Resource Area

Lincoln Bench II Emergency Stabilization and Rehabilitation Plan
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1 Purpose of and Need for Action

1.1 A human caused fire originating on public land in T.19S., R.46E., W.M. Section 31 during the evening of June 16, 2002, rapidly spread to include 358 acres. It was suppressed on initial attack by federal and local rural firefighters as the Lincoln Bench II Fire (N 227) (figure 1). The fire occurred almost exclusively on public land administered by the Vale District Bureau of Land Management. Containment and control were achieved on June 17. The fire was declared out June 18. Suppression activities were limited to direct attack with engines and indirect back-burning. Access to the fire was by way of the paved Lytle Boulevard on the southwest boundary and dirt two-tracks on the remaining sides.

The majority of the burned area is within Lincoln Bench Pasture of North Harper Allotment. Minor acreage is ungrazed on private and public land adjacent to Lytle Boulevard on the southwest corner of the fire. Although small portions interior of the burned perimeter were dominated by native sagebrush/bunchgrass vegetation communities prior to the fire, the majority of the burned area was also burned in a wildfire in July 1999 and was dominated by annual species. Somewhat successful restoration seeding and temporary protective fencing was implemented following the 1999 fire (EA-OR-030-99-021). Native communities contained widely dispersed Wyoming big sagebrush (*Artemisia tridentata ssp. wyomingensis*), rabbitbrush (*Chrysothamnus sp.*), bluebunch wheatgrass (*Pseudorogneria spicata*), Thurber's needlegrass (*Stipa thurberiana*), and Sandberg bluegrass (*Poa secunda*). Cheatgrass (*Bromus tectorum*), tumble mustard (*Sisymbrium altissimum*) and clasping pepper weed (*Lepidium perfoliatum*) dominate through most vegetation communities. Scotch thistle (*Onopordum acanthium*), an aggressive biennial, dominated small acreage at a number of locations in and adjacent to the fire boundary. Scotch thistle was also present as a minor component throughout the burned area. Rush skeletonweed (*Chondrilla juncea*), an invasive perennial noxious weed, has also been inventoried within and adjacent to the burned area. Where native perennial herbaceous species were limited or devoid in the understory of sagebrush/ grassland communities prior to the 1999 fire, the shrub community provided competition with annual species for available moisture and soil nutrients. Sagebrush steppe vegetation communities provided year-long or winter habitat for a number of wildlife species including big game animals, upland game species, and other sagebrush dependent species.

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Interagency guidance and BLM policy as stated in the Interagency Emergency Stabilization and Rehabilitation Handbook and draft Bureau of Land Management Supplemental ESR Guidance (May 20, 2002) provides for emergency stabilization and rehabilitation where fire has an adverse impact on vegetation, soils, and watersheds and also to minimize other adverse changes to the extent practicable, including the following:

- loss of vegetative cover for watershed protection;
- loss of soil and on-site productivity;

! loss of water control and deterioration of water quality;
! invasion of burned area by flammable annual species which increase the potential for repeated wildfire.

The area burned by Lincoln Bench II Fire is in need of stabilization and rehabilitation to minimize soil movement, preserve on-site productivity, reduce the invasion and increased dominance of undesirable flammable annual plants and reduce the potential for increased dominance of existing noxious weed as well as the invasion of new species. These objectives can be met by protecting residual native vegetation communities during a period necessary for recovery of health and vigor and establishing desirable perennial plant cover to replace annual vegetation communities to the extent possible. This environmental assessment analyzes the benefits and risks of implementing rehabilitation actions to establish native perennial vegetation cover as compared to establishment of desirable nonnative perennial species. It also includes a limited rehabilitation and a no action alternative.

1.2 In addition to other National Environmental Policy Act requirements, this environmental assessment was completed to ensure that treatments identified in the Emergency Stabilization and Rehabilitation Plan are consistent with the applicable land use plan objectives and decisions. Seeding and planting of grass, forb and shrub species as proposed in the preferred alternative is consistent with the following recommendations of the Northern Malheur Management Framework Plan dated March 14, 1983:

- SWA 3.2/4.1 Implement a vegetation manipulation program on approximately 80,000 acres of low-elevation (below 3,000 feet) lacustrine sediment material on the public land by reseeding an adapted perennial grass that will help protect these soils from wind and water actions and will also extend the wildfire resistance of the plant communities into the growing season.

- W/L 1.1 Seed or plant seedlings of suitable shrub and/or tree species on select sites within areas designated “C” on the Habitat Opportunity overlay. Species under consideration should include juniper, curl leaf mountain mahogany, aspen, cottonwood, willow, choke and bitter cherry. Livestock grazing of the treated areas should be prohibited for a minimum of two growing seasons and then allow spring season use there after.

- W/L 10.1 Within areas marked “F” on overlay, increase the survival of palatable browse species reproduction by 20% from the existing 5% (estimated) by 1990 through the initiation of livestock grazing systems utilizing “prescription” grazing toward a vegetative objective. Coordinated AMP/HMP planning will be required.

- W/L 10/2 Future seedings should include a variety of grasses, forbs, and browse (shrub) species in the seeding mixture. A mixture of approximately ½ grasses, ¼ forbs, and ¼ browse - each being represented by from 4 to 6 species - is considered ideal.

- W/L 10.4 Wild fire should be aggressively suppressed in critical browse and/or cover habitats.

- W/L 11.4 Attain and/or maintain a vegetative composition of 55% grasses, 25% forbs, and 20% shrubs.

Additionally, implementation of seeding practices to attain desired perennial vegetation cover and to protect recovering vegetation resources following fire are consistent with objectives and proposed management actions identified in the Proposed Southeastern Oregon Resource Management Plan and Final Environmental Impact Statement (USDI-BLM 2001), analysis leading to a replacement land use plan for Malheur and Jordan Resource Areas of Vale District BLM.

The Ironside EIS Area Rangeland Program Summary (USDI-BLM 1984) and North Harper Allotment Management Plan implemented in 1982 does not provide specific management direction for seeding and establishment of shrub species though does identify management objectives to improve or maintain upland ecological conditions within native pastures.

Temporary fencing to ensure short-term exclusion of livestock from burned areas pending establishment of seed species and recovery of residual vegetation is also consistent with the Northern Malheur Management Framework Plan and affected activity plans.

1.3 Decisions to be made as a result of information provided in this environmental assessment include whether to seed portions of the Lincoln Bench II fire and if so, what species mixes would be planted to best meet resource management objectives. Additionally, this environmental assessment will provide information used to decide what practices would be implemented, if any, to exclude livestock impacts and herbivory from burned and rehabilitated areas which limit recovery and establishment of desired vegetation resources following the fire and seeding actions. No other federal, state or local government is involved in the NEPA analysis of the proposed actions, beyond issue identification, review, and comment on content of the draft document.

1.4 Internal scoping of issues relevant to the need for rehabilitation actions and protection from livestock impacts identified the need to ensure vegetation communities be managed to attain desired future conditions subsequent to the fire, including meeting riparian, upland vegetation,

watershed, special status species, and cultural resource management objectives presented in the land use plan. The level of controversy of potential rehabilitation actions implemented is moderate with one regional environmental organization requesting to be informed of proposed actions in North Harper grazing allotment. Additionally, the Oregon Department of Fish and Wildlife is typically informed of proposed fire rehabilitation actions as is the Malheur County Court. Memoranda of Understanding between BLM and a number of Tribes (The Burns Paiute Tribe, The Confederated Tribes of the Umatilla Reservation) are in place to define coordination.

1.5 Proposed protection of vegetation resources and seeding would be implemented as annual workload for BLM staff and/or through contract with private entrepreneurs. Temporary fencing would be maintained by livestock operators benefitting from retaining the remainder of Lincoln Bench Pasture available for grazing.

2 Alternatives Including the Proposed Action

2.1 Alternatives considered and analyzed include the proposed action, a nonnative seeding alternative, a limited rehabilitation alternative, and a no action alternative. Herbicide treatment of burned areas with herbicides which are specific to annual species such as Oust or Plateau to control competition during germination and establishment of perennial seeded species was considered though not analyzed since use of Oust is not consistent with an injunction on the use of herbicides on public lands in Oregon and Washington and Plateau is not licensed for use in rangeland systems. Additionally, consideration of the use of locally collected seed which may be more specifically adapted to 2700 foot elevation shrub/steppe rangelands in Northern Malheur County was not completed due to the limited availability of adequate seed. A summary of treatments analyzed by alternative is presented in Table 1.

Table 1: Summarized treatments by alternative

Alternative / Action	Proposed Action	Nonnative Seeding	Limited Rehab	No Action
Native seeding (acres)	200	0	0	0
Nonnative seeding (acres)	70	270	0	0
Seedling shrub planting (acres)	100	0	0	0
Aerial sagebrush seeding (acres)	350	0	0	0
Tire-packing sagebrush seeding (acres)	100	0	0	0
Temporary fencing (miles)	2.5	2.5	2.5	0

Temporary livestock exclusion (acres)	375	375	375	5,544
Monitoring	Yes	Yes	Yes	No

2.2 Alternatives Analyzed

2.2.1 **Proposed Action:** Approximately 270 acres of public land in the burned area would be seeded using rangeland drills during the fall of 2002 and 2003 or spring of 2003 and 2004. An estimated 200 acres on Lincoln Bench would be seeded to a native mixture to further strengthen that native seeding completed following the 1999 fire. An additional 70 acres with deep alluvial soils adjacent to Lytle Boulevard would be seeded to a nonnative mixture to further strengthen the nonnative seeding completed following the 1999 fire. The remaining 80 acres of public and 8 acres of private land within the fire boundary would not be seeded due to land ownership or steepness of slopes. The locations of each proposed treatment are presented in Figure 2.

Areas seeded to the native mix would include flat and moderately sloped topography on Lincoln Bench. The native mixture would include cultivars of bluebunch wheatgrass, basin wildrye (*Leymus cinereus*),western wheatgrass (*Pascopyrum smithii*), dry-land alfalfa (*Medicago sp.*), small burnet (*Sanguisorba minor*), Lewis flax (*Linum perenne var. lewisii*), hawksbeard (*Crepis sp.*), bitterbrush (*Purshia tridentata*), and/or fourwing saltbush (*Atriplex canescens*) at a drilling rate of approximately 9 pounds per acre (35 seeds per square foot) (Table 2). All seed when mixed would be treated with organic seed coating to enhance germination success and seedling survival.

Areas seeded to the nonnative mix would include draw-bottom and low benches adjacent to Lytle Boluvard . Treatment would include the application of glyphosate herbicide at 0.5 lbs per acre during spring 2003 following by drill seeding during fall of 2003 or spring of 2004. The nonnative mixture would include cultivars of crested wheatgrass (*Agropyron cristatum*), basin wildrye, dry-land alfalfa, small burnet, Lewis flax, Hawksbeard, bitterbrush (*Purshia tridentata*), and/or fourwing saltbush (*Atriplex canescens*) at a drilling rate of approximately 9 pounds per acre (approximately 30 seeds per square foot) (Table 2). All seed when mixed would be treated with organic seed coating to enhance germination success and seedling survival.

Table 2: Proposed alternative seed mixes for the Lincoln Bench II Emergency Stabilization and Rehabilitation Plan

Species	Pounds Per Acre	Seeds per ft^2	Total Pounds
Native seeding* 200 acres			
Secar Bluebunch Wheatgrass	2.5	8.0	500
Goldar Bluebunch Wheatgrass	3	9.6	600
Magnar Basin Wildrye	2	6.0	400
Arriba Western Wheatgrass	0.5	1.3	100
Ladak Alfalfa	0.4	1.9	80
Small Burnet	0.25	0.3	50
Apar Lewis Flax	0.25	1.7	50
Hawksbeard	0.1	1.1	20
Totals	9	29.9	1,800
Nonnative seeding ** 70 acres			
Fairway Crested Wheatgrass	3.5	14.1	250
Magnar Basin Wildrye	3.5	10.5	250
Arriba Western Wheatgrass	1	2.6	50
Ladak Alfalfa	0.25	1.2	20
Small Burnet	0.25	0.3	20
Apar Lewis Flax	0.4	2.7	28
Hawksbeard	0.1	1.1	7
Totals	9	32.5	625
Shrub Species *** 350 acres			
Wyoming Big Sagebrush	1 lb bulk (0.1 lbs pls)		350 lbs bulk

* Other varieties of native grass species listed or other forbs may be substituted based on seed availability or cost. Bitterbrush and/or fourwing saltbush may be added to drilled mixtures.
** Other varieties of nonnative grass species listed or other forbs may be substituted based on seed availability or cost. Bitterbrush and/or fourwing saltbush may be added to drilled mixtures.
*** Sagebrush seed may include up to 25 percent basin big sagebrush seed, dependent of seed availability and cost.

All public land acres of the burned area would be broadcast seeded, on completion of drilling, with local Wyoming and/or basin big sagebrush at a rate of 0.1 pounds pure live seed (pls) per acre (approximately 1 pound per acre bulk). Approximately 100 acres of accessible portions of the sagebrush seeding would be tire-packed to better ensure seed contact with the soil during germination and up to 100 acres of the burned area would be planted with 1-0 seedlings of additional shrub species including bitterbrush, four-wing saltbush, shadscale, and/or sagebrush to provide nurse stock for future colonization of the site by these shrub species. Shrub seedlings would be planted at a rate of approximately 50 seedlings per acre as available in the spring of 2003 and 2004 utilizing emergency fire rehabilitation funds and in later years as other funding sources are available.

Due to the location of the 358 acre fire adjacent to Lytle Boulevard, a paved county road which serves as a major traffic corridor, and its location adjacent to the southern boundary of Lincoln Bench Pasture, approximately 2.5 miles of temporary fencing would be proposed to exclude livestock grazing from fire impacted vegetation communities. The burned area would be closed to livestock grazing through July 15, 2004 and until monitoring indicates that desired residual perennial vegetation has recovered to levels that are adequate to support and protect upland function and that seeded species have become established.

No repairs to permanent fence between Lincoln Bench Pasture and adjacent private land are required since these fences were reconstructed with fire tolerant materials in 2000 following the 1999 fire.

Monitoring of the burn area would consist of livestock use supervision, vegetation monitoring and weed monitoring. Detected weeds would be controlled utilizing herbicide and mechanical methods in accordance with the EA and Decision Record for the Noxious Weed Control Program 1994-1998 (USDI/BLM 1994).

2.2.2 **Nonnative Seeding Alternative:** Approximately 270 acres of public land would be seeded with a nonnative mixture, using rangeland drills during the fall of 2002 or spring of 2003. Those areas seeded would include flat and moderately sloped topography. The nonnative mixture would include cultivars of crested wheatgrass (*Agropyron cristatum*), basin wildrye, western wheatgrass (*Pascopyrum smithii*), dry-land alfalfa, small burnet, Lewis flax, and hawksbeard at a drilling rate of approximately 9 pounds per acre (approximately 30 seeds per square foot) (Table 3). All seed when mixed would be treated with organic seed coating to enhance germination success and seedling survival. The remaining 80 acres of public and 8 acres of private land within the fire boundary would not be seeded due to land ownership or steepness of slopes.

Table 3: Nonnative alternative seed mixes for the Lincoln Bench II Emergency Stabilization and Rehabilitation Plan

Species	Pounds Per Acre	Seeds per ft^2	Total Pounds
Nonnative seeding * ***270 acres***			
Fairway Crested Wheatgrass	5	20.1	1,350
Magnar Basin Wildrye	2	6.0	550
Arriba Western Wheatgrass	1	2.6	250
Ladak Alfalfa	0.4	1.9	100
Small Burnet	0.3	0.4	80
Apar Lewis Flax	0.3	2.0	80
Totals	9	33.0	2410

* Other varieties of nonnative grass species listed or other forbs may be substituted based on seed availability or cost.

Due to the location of the 358 acre fire adjacent to Lytle Boulevard, a paved county road which serves as a major traffic corridor, and its location adjacent to the southern boundary of Lincoln Bench Pasture, approximately 2.5 miles of temporary fencing would be proposed to exclude livestock grazing from fire impacted vegetation communities. The burned area would be closed to livestock grazing through July 15, 2004 and until monitoring indicates that desired residual perennial vegetation has recovered to levels that are adequate to support and protect upland function and that seeded species have become established.

No repairs to permanent fence between Lincoln Bench Pasture and adjacent private land are required since these fences were reconstructed with fire tolerant materials in 2000 following the 1999 fire.

Monitoring of the burn area would consist of livestock use supervision, vegetation monitoring and weed monitoring. Detected weeds would be controlled utilizing herbicide and mechanical methods in accordance with the EA and Decision Record for the Noxious Weed Control Program 1994-1998 (USDI/BLM 1994).

2.2.3 **Limited Rehabilitation Alternative:** No seeding of perennial grass, forb or shrub species would be considered. Plants established as a result of seeding following the 1999 fire and desirable perennial species which have survived the recent two fires would be protected with the construction and maintenance of approximately 2.5 miles of temporary fencing to exclude livestock grazing from fire impacted vegetation communities. The burned area would be closed

to livestock grazing through July 15, 2004 and until monitoring indicates that desired residual perennial vegetation has recovered to levels that are adequate to support and protect upland function.

Monitoring of the burn area would consist of livestock use supervision, vegetation monitoring and weed monitoring. Detected weeds would be controlled utilizing herbicide and mechanical methods in accordance with the EA and Decision Record for the Noxious Weed Control Program 1994-1998 (USDI/BLM 1994).

2.2.4 **No Action Alternative:** No emergency rehabilitation would be completed. Revegetation of the burned area would be allowed to occur from seed and plant materials which remain on site. Livestock would be excluded from Lincoln Bench pasture for two growing seasons. No monitoring of the burned area would be completed beyond that scheduled prior to the fire.

3 Affected Environment

3.1 This section presents relevant resource components of the existing environment, that is the baseline environment.

3.2 **Vegetation, Soils and Watershed:** Native shrub steppe vegetation communities contained Wyoming big sagebrush, rabbitbrush (*Chrysothamnus sp.)*, bluebunch wheatgrass, Thurber's needlegrass, and Sandberg bluegrass (*Poa secunda*) prior to the 1999 fire. Areas adjacent to livestock water sources outside the fire boundary and other areas of previous disturbance were dominated by annual and biennial herbaceous species including cheatgrass, Medusahead (*Teaniatherum caput-medusae*), tumble mustard, Russian thistle (*Salsola kali*), and Scotch thistle. Where native perennial herbaceous species were limited or devoid in the understory of sagebrush/ grassland communities, the shrub community provided competition with annual species for available moisture and soil nutrients. Microbiotic crusts composed of cyanobacteria, green algae, lichens, mosses, microfungi, and/or other bacteria occupy many open spaces between higher plants. Seeding during the fall of 1999 provided a limited stand of native species where seeded but the nonnative seeding responded poorly against heavy competition from weedy species.

Approximately 9000 acres of depleted rangeland within North Harper Allotment was seeded to crested wheatgrass with varying levels of reestablishment of big sagebrush as a result of the Vale Project and rehabilitation efforts since the early 1960's. The 1700 acre Lincoln Bench Brush Control located immediately north of the Lincoln Bench II Fire within Lincoln Bench Pasture was sprayed in 1967 to control sagebrush and release perennial herbaceous species.

Soils in the area are derived from lacustrine sediments, loess deposits, and alluvium. Textures range from silty clay loams to sandy loams dependent on the parent material. These soils have

the potential to be highly erosive without vegetation cover and on steep slopes. Soils in the burned area include Xeric Haplocambids (Warden and Royal series), Xeric Haplodurids (Taunton and Gravden series), and Xeric Torriorthents (Kennewick and Wahluke series).

No perennial water sources lie within the proposed treatment area, although an Owyhee Irrigation District canal is adjacent to the road which forms the south boundary of the fire. Drainage is to the south into Cow Hollow, Owyhee River , and Snake River.

3.3 **Noxious Weeds:** Scotch thistle, an aggressive biennial, dominates a small acreage at a number of locations within the fire boundary and is present as a minor component throughout. Rush skeletonweed, an invasive perennial noxious weed, is known to be present within the fire boundary and a number of adjacent sites on Lincoln Bench. Whitetop or hoary cress (*Cardia sp.*) another perennial noxious weed, is also present adjacent to the burned area. Medusahead, an aggressive annual grass, is present on ridges devoid of sagebrush immediately north of the burned area.

3.4 **Livestock Grazing:** The burned area is almost entirely within the 5,544 acre Lincoln Bench Pasture of North Harper Allotment (00402). A minor acreage of the southern portion of the fire was on private and public land adjacent to Lytle Bouevard which is not grazed. Eight permittees are authorized to graze livestock in the community allotment, although only three currently use Lincoln Bench Pasture in their grazing rotation. Active animal unit months (AUMs) within the 31,500 acre allotment are listed below: No grazing authorization for use in North Harper Allotment is currently held in suspension.

Permittees who currently use Lincoln Bench Pasture

Frank Shirts	400 AUMs
Harry Smith	566 AUMs
Gary Boor	143 AUMs

Permittees who currently do not use Lincoln Bench Pasture

Steve and Becky Hawkins	809 AUMs
Findley Land & Livestock LLC	1602 AUMs
Van Schulthies	84 AUMs
Ray Schulthies Estate	135 AUMs
Darrell Standage	96 AUMs
Jerald and Tammy Holloway	278 AUMs

North Harper Allotment is located immediately south of Vale, Oregon, and is part of the Harper Basin Management Unit. Boundaries of the allotment are approximately defined by Cow Hollow to the south, Lincoln Bench to the east, agricultural land in Sand Hollow to the north, and Johnson Gulch to the west.

North Harper Allotment was classified as "I" (Intensive Management) category allotments for management in the 1981 Ironside EIS Area Rangeland Program Summary Record of Decision. The season of use authorized within North Harper Allotment by the allotment management plan is between April 1 and October 15 annually with a deferred rotation system.

3.5 **Wildlife:** The proposed treatment area is within year-long and winter range for mule deer and pronghorn antelope. Other wildlife species found in the area include neotropical migratory song birds, small mammals and reptiles. Brush control and previous wildfires on Lincoln Bench eliminated shrub dominance from a number of areas within the pasture, leading to a dominance by annual and weedy species and the loss of winter cover and browse. Limited recovery of shrub species has occurred. Wildlife depredation on adjacent private crop lands continues to be identified as a problem.

No known wildlife species listed as threatened or endangered under the Endangered Species Act of 1973 are present within or adjacent to Freezeout Allotment. Other wildlife species found in the area include long-billed curlews and burrowing owls (both BLM sensative species). Both species nest in annual vegetation habitat typical of the low elevation bottom in the treatment area. Sage grouse are not known to be present in the immediate area.

3.6 **Recreation and Visual Resources:** Dispersed outdoor recreation in and near the proposed fire rehabilitation area consists primarily of off highway vehicle usage and hunting of upland birds and big game animals. Some dispersed general sightseeing occurs. The burn is within a visual resource management Class III area. The objective of Class III is to primarily retain the existing character of the landscape with a moderate level of change acceptable. Change should conform to the basic elements of the predominant natural features of the characteristic landscape.

3.7 **Cultural Resources:** The route of the Oregon Trail parallels and crosses Lytle Boulevard along the western two mile long boundary of the fire. A corridor adjacent to a portion of that trail south of the town of Vale and north of the fire is identified as a property of national significance with designation as the Oregon Trail Keeney Pass Historic District. Management of this corridor is designed to preserve and enhance the visual integrity and aesthetic values of the area surrounding the Oregon Trail.

Prehistoric and historic use of this area has been documented by the presence of artifacts and through oral histories. Prehistoric sites are mainly lithic scatters and camp sites associated with springs and water sources. Historic sites are represented by old tin can scatters and ranching/household trash.

3.8 **Special Status Plants:** No plant species listed or proposed for listing under the Endangered Species Act of 1973 are known to be present within the area burned. Mulford's milkvetch (*Astragulus mulfordiae*), a species listed by the State of Oregon as endangered, has been located on a number of sites providing sandy habitats two miles west of the fire. Similarly, Malheur forget-me-not *(Hackelia cronquistii*), another species listed by the State of Oregon as endangered, has been located on north facing slopes protected by sagebrush cover one mile north of the fire boundary. No ground disturbing actions are proposed within the habitats of either species. No other special status plant species are known or suspected within the immediate area.

3.9 **Areas of Critical Environmental Concern:** The Keeney Pass segment of the potential Oregon Trail Area of Critical Environmental Concern (ACEC), within portions of Lincoln Bench Pasture adjacent for Lytle Boulevard and north of the proposed project area, is recommended for designation within the Proposed Southeastern Oregon Resource Management Plan (April 2001) based on its historic and scenic values.

3.10 **Climate/Topography:** Lincoln Bench II Fire occurred in rolling hills where the elevation above sea level ranges from 2500 feet to 2700 feet. Semi desert shrub steppe vegetation communities result from cold winters and hot dry summers. The long term average annual precipitation measured at Vale, Oregon (seven miles north of the fire boundary) is 9.77 inches (National Oceanic and Atmospheric Administration Climatological Data Annual Summary; Oregon 1999). Precipitation occurs primarily as snow fall during the winter with occasional mid-summer thunder storms.

Neither the proposed actions nor any of the alternatives will impact climate or topography.

3.11 **Other Mandatory Elements:** The following mandatory elements are either not present or would not be affected by the proposed action or alternatives:

- Air Quality
- Wild Horse/Burro Management
- Native American Religious Concerns
- Hazardous Wastes
- Prime or Unique Farmlands
- Wetlands/Riparian/Flood Plains
- Wild and Scenic Rivers
- Wilderness or Wilderness Study Areas
- Environmental Justice
- Actions to Expedite Energy-Related Projects (Executive Order No. 13212 of May 18, 2001)

4 Environmental Consequences

4.1 This chapter is organized by alternatives to illustrate the differences between the proposed action and other alternatives including the no action alternative.

4.2 **Proposed Action Alternative:** Consequences of implementing the proposed alternative; native drill seeding of approximately 200 acres, nonnative drill seeding of approximately 70 acres, shrub establishment, and temporary fencing to exclude livestock grazing would result as summarized in the following sections.

4.2.1 **Vegetation, Soils and Watershed:** Drilling of native seed on 200 acres of public land and drilling of nonnative seed on 70 acres of public land following reduction of competition of annual species through herbicide application would provide an opportunity and seed source for a more stable perennial vegetative cover over much of the burned area, especially within areas recently dominated by annual species. With successful establishment of seedings, native and desirable nonnative perennials would replace more flammable annuals, somewhat reducing the frequency and severity of wildfire. Establishment of perennial grasses, forbs and shrubs would restore ecological function to the portions of Lincoln Bench Pasture which burned. Establishment of sagebrush, fourwing saltbush and/or bitterbrush would provide vegetative community diversity and restore structure to the vegetative community that has been lost to the Lincoln Bench II and other recent fires in this area. Risk of poor establishment of native species in areas previously dominated by annual species, especially in the event of limited soil moisture in the spring of 2003, would be greater than the similar risk of planting more competitive nonnative species such as crested wheatgrass which is adapted to drier conditions and is tolerant of greater grazing impacts. Wildlife habitat values and species diversity would be greater with establishment of native species as compared to nonnative species resulting from rehabilitation actions.

Temporary exclusion of livestock from a portion of Lincoln Bench Pasture, including the burned area and areas seeded and/or planted, would allow recovery of residual desirable species and establishment of seeded species without impacts from sheep and cattle grazing.

Soil erosion would increase in the short term as a result of loss of vegetative cover from the fire. Soil erosion rates would decrease as perennial species, including grasses, forbs, and shrubs which in combination fill much of the soil profile with roots, gain dominance of the site in years subsequent to seeding. The annual species which previously vegetated the area provide much less protection of the soil surface and profile than would desirable perennial species. With implementation of this alternative and successful establishment of desired species, erosion rates would decrease further than under the no action alternative due to establishment of perennial species. Perennial vegetation would reduce soil erosion and down stream sedimentation by providing improved protection of the soil surface and by reducing the frequency of wildfire.

Establishment of perennial vegetation would also be beneficial to recovery and reestablishment of microbiotic crusts since dominance by exotic annual vegetation exclude these species.

4.2.2 **Noxious weeds:** Establishment of perennial species would help prevent the potential for spread and takeover of the site by noxious weeds, particularly rush skeletonweed, Scotch thistle, and whitetop. Establishment of a diverse shrub component would more fully occupy the soil profile with roots of desirable perennial species as compared to shallow rooted perennial grasses and forbs alone. Full occupation of the soil profile with roots of desirable species would provide additional competition to reduce dominance by deep rooted weedy species. Establishment of diverse perennial vegetation communities including grasses, forbs, and shrubs would help prevent or minimize the proliferation and invasion of noxious weed species within the burned area and adjacent to roads impacted by suppression actions. A reduction in the occurrence of weeds adjacent to roads would limit transport of seed to new sites within the burn area and offsite. Increased inventory for noxious weeds and appropriate treatment will preclude their spread and establishment into niches opened by the fire.

4.2.3 **Livestock Grazing:** Livestock would be excluded from burned portions of Lincoln Bench Pasture through at least two growing seasons and until seeded species are established. The proposed exclusion area comprises approximately six percent of Lincoln Bench Pasture. Scheduled grazing within Lincoln Bench Pasture, as defined in the allotment management plan with a deferred system, identifies an average annual use of 387 AUM's by cattle. This use represents approximately 55 percent of the combined authorized use of 709 AUM's in North Harper Allotment by Harry Smith and Gary Boor. Thus, the proportionate loss of forage productivity from the area burned represents less than four percent of these two operators authorization. Sheep use is less well defined with terms of the permit requiring that camps be moved at least every fifth day to prevent repeat grazing of any area. Although Lincoln Bench Pasture is one of four pastures used by sheep, it is anticipated that the loss of use of approximately six percent of this pasture would not affect Frank Shirt's authorized use of 400 AUM's in North Harper Allotment. Livestock grazing schedules would be adjusted short term within the flexibility of the allotment management plan to continue the authorization of livestock grazing in North Harper Allotment while continuing to meet management objectives.

In the long term, positive benefits would accrue to livestock operators due to the establishment of perennial vegetation. An increased and more stable forage base would be established, allowing for increased livestock gains and more stable livestock operations over the long term.

4.2.4 **Wildlife:** The proposed action would result in the reestablishment and maintenance of higher quality and greater quantity of year-long forage, browse, and cover for mule deer and pronghorn antelope within the project area with the establishment of desirable herbaceous and shrub species. Structural habitat for sagebrush dependent species, including potentially sage grouse, would be restored in the long term with reestablishment of desirable shrub species.

Foraging and habitat values provided by perennial herbaceous species would be improved. Timing, season, and intensity of big game depredation on private crop lands adjacent to the burned area would be expected to be changed with establishment of desired herbaceous and shrub species as animals chose forage sources as well as thermal and hiding cover.

4.2.5 **Recreation and Visual Resources:** Impacts to dispersed recreation activities would be insignificant. In the event that rehabilitation activities occur during game hunting seasons, any game species close to the activities would be temporarily disturbed.

Visual resources within and adjacent to the proposed action would be enhanced with development of desirable perennial plant species and vegetation structure. Surface impacts of the proposed rehabilitation efforts do not exceed management objectives for visual resource Class III. Visual evidence of drilled seeding would remain evident long term, though would be obscured with development of sagebrush cover over time.

4.2.6 **Cultural Resources:** A Class III cultural resources survey was conducted prior to seeding following the 1999 fire rehabilitation. Recorded sites will be reflagged and avoided as appropriate. A survey for paleo resources was also conducted prior to surface disturbing activities following the 1999 fire. Paleo resources located, depending on the nature and extent of the fossil locality, were either flagged and avoided during rehabilitation activities or the fossils were recovered prior to rehabilitation activities.

Enhanced establishment of desirable perennial species would assist in obscuring firelines adjacent to the Oregon Trail National Historic District and the proposed ACEC. Establishment of shrubs through seeding and planting would further remove unnatural lines caused be the fire and suppression actions.

4.2.7 **Special Status Plants:** Special Status plant species would not be affected since no activity is planned within known or suspected habitats. In the event habitats or plants are discovered during rehabilitation actions, mitigation actions would be implemented to avoid impacts which would contribute for the need for listing.

4.2.8 **Areas of Critical Environmental Concern:** As noted in the cultural resource analysis, establishment of desirable perennial grass, forb and shrub species would contribute to the historic and scenic values for which the adjacent Keeney Pass segment of the Oregon Trail ACEC is proposed.

4.3 **Nonnative Seeding Alternative:** Consequences of implementing the nonnative seeding alternative; nonnative drill seeding of approximately 270 acres and temporary fencing to exclude livestock grazing would result as summarized in the following sections.

4.3.1 **Vegetation, Soils and Watershed:** Drilling of nonnative seed on 270 acres of public land would provide an opportunity and seed source for a more stable perennial vegetative cover over much of the burned area, especially within areas recently dominated by annual species. With successful establishment of seedings, desirable nonnative perennials would replace more flammable annuals, somewhat reducing the frequency and severity of wildfire. Establishment of perennial grasses would partially restore ecological function to the portions of Lincoln Bench Pasture which burned. Risk of poor establishment of perennial grasses in areas dominated by annual species, especially in the event of limited soil moisture during the spring growing season of 2003, would be greater as compared to the risk with spring application of herbicides as in the proposed alternative. Wildlife habitat values and species diversity would be greater with establishment of desirable perennial grasses as compared to annual species.

Temporary exclusion of livestock from a portion of Lincoln Bench Pastures, including the burned area and areas seeded, would allow recovery of residual desirable species and establishment of seeded species without impacts from sheep and cattle grazing.

Soil erosion would increase in the short term as a result of loss of vegetation cover from the fire. Soil erosion rates would decrease as perennial grass gains dominance of the site in years subsequent to seeding. The annual species which previously vegetated the area provide much less protection of the soil surface than would desirable perennial species. Establishment of perennial vegetation would also be beneficial to recovery and reestablishment of microbiotic crusts, since dominance by exotic annual vegetation exclude these species.

4.3.2 **Noxious weeds:** Establishment of perennial species would help prevent the potential for spread and takeover of the site by noxious weeds, particularly rush skeletonweed, Scotch thistle, and whitetop. Delaying the establishment of a diverse shrub component through natural seeding from surrounding vegetation communities, a process which could take up to 30 years in these Wyoming big sagebrush communities, would allow deep rooted weed species the opportunity to access soil moisture below the reach of shallow rooted perennial grasses and forbs alone. Establishment of perennial vegetation communities composed of primarily nonative grass would partially prevent or minimize the proliferation and invasion of noxious weed species within the burned area and adjacent to roads impacted by suppression actions. A reduction in the occurrence of weeds adjacent to roads would limit transport of seed to new sites within the burn area and offsite. Increased inventory for noxious weeds and appropriate treatment will preclude their spread and establishment into niches opened by the fire.

4.3.3 **Livestock Grazing:** Livestock would be excluded through at least two growing seasons and until seeded species are established from burned portions comprising approximately six percent of Lincoln Bench Pasture. Impacts would be as identified in the proposed alternative.

In the long term, positive benefits would accrue to livestock operators due to the establishment of perennial nonnative grass communities. An increased and more stable forage base would be established, allowing for increased livestock gains and more stable livestock operations over the long term.

4.3.4 **Wildlife:** Habitat values provided by nonnative seedings and limited shrub reestablishment would be somewhat improved for mule deer, pronghorn antelope, and sagebrush dependent species as compared to a vegetation community dominated by annual species. Timing, season, and intensity of big game depredation on private crop lands adjacent to the burned area would be expected to be unchanged as animals chose forage sources as well as thermal and hiding cover.

4.3.5 **Recreation and Visual Resources:** Impacts to dispersed recreation activities would be insignificant. In the event that rehabilitation activities occur during game hunting seasons, any game species close to the activities would be temporarily disturbed.

Visual resources within and adjacent to the proposed action would be enhanced with establishment of nonnative grass and perennial forb species . Surface impacts of the proposed rehabilitation efforts do not exceed management objectives for visual resource Class III. Visual evidence of drilled seeding would remain evident long term.

4.3.6 **Cultural Resources:** A Class III cultural resources survey was conducted prior to seeding following the 1999 fire rehabilitation. Recorded sites will be reflagged and avoided as appropriate. A survey for paleo resources was also conducted prior to surface disturbing activities following the 1999 fire. Paleo resources located, depending on the nature and extent of the fossil locality, were either flagged and avoided during rehabilitation activities or the fossils were recovered prior to rehabilitation activities.

Enhanced establishment of desirable perennial species would assist in obscuring fire impacts adjacent to the Oregon Trail National Historic District and the proposed ACEC.

4.3.7 **Special Status Plants:** Special Status plant species would not be affected since no activity is planned within known or suspected habitats. In the event habitats or plants are discovered during rehabilitation actions, mitigation actions would be implemented to avoid impacts which would contribute for the need for listing.

4.3.8 **Areas of Critical Environmental Concern:** As noted in the cultural resource analysis, establishment of desirable nonnative perennial grass and forb species would little detract from the historic and scenic values for which the adjacent Keeney Pass segment of the Oregon Trail ACEC is proposed.

4.4 **Limited Rehabilitation Alternative:** Consequences of implementing the limited rehabilitation alternative; temporary fencing to exclude livestock grazing would result as summarized in the following sections.

4.4.1 **Vegetation, Soils and Watershed:** Vegetative structural and species diversity would remain low in many of these areas dominated by annual species. Annual species and noxious weed species would continue to dominate many sites within the burn with a mat of cheatgrass and other annual species seed. The potential for invasion of burned areas and other sites of soil disturbance opened to noxious weed seedling establishment would remain high. Potential for repeated wildfire and rapid spread would be high. The cumulative effects of past and future wildfire adjacent to this burn would cause a continued loss of vegetative diversity and structure which would accelerate over time as more of these low elevation ranges are retained in or converted to cheatgrass dominated grasslands.

Temporary exclusion of livestock from a portion of Lincoln Bench Pastures which burned would allow recovery of residual desirable species, including those planted following the 1999 fire, without impacts from sheep and cattle grazing.

Soil erosion would increase in the short term as a result of loss of vegetation cover from the fire. Soil erosion rates would decrease as perennial and annual vegetation reestablishes ground cover grass gains dominance of the site in years subsequent to seeding. Reestablishment and recovery of microbiotic crusts impacted by the second fire in three years would be impaired by the continued dominance by exotic annual vegetation.

4.4.2 **Noxious weeds:** Failure to seed desirable perennial herbaceous species over much of the areas previously dominated by annual species would perpetuate the spread and increased dominance of noxious and other weedy species, resulting in the need for increased control efforts in the future. Seed production of weeds and seed transport would be significant, limiting the success of natural recovery of remaining desirable perennial plants. The areas previously dominated by sagebrush and other desirable deep-rooted species would be susceptible to further invasion by noxious and weedy species. Lack of shrubs would leave the area susceptible to invasion by rush skeletonweed and other species dependent on mid summer and fall deep soil moisture. These areas dominated by annual vegetation would continue to decline in seral condition as they lose remaining native perennial vegetation, especially with more frequent fire return to these fire prone vegetation communities.

4.4.3 **Livestock Grazing:** Livestock would be excluded from burned portions through at least two growing seasons and until desirable species have recovered from fire impacts, comprising approximately six percent of Lincoln Bench Pasture. Impacts would be as identified in the proposed alternative.

In the long term, the productivity and stability of the forage production would return to prefire levels with further establishment of seedings following the 1999 fire.

4.4.4 **Wildlife:** Habitat values for mule deer, pronghorn antelope, and sagebrush dependent species would be unchanged as compared to prefire vegetation community dominated by annual species and the further establishment of herbaceous species planted following the 1999 fire. Timing, season, and intensity of big game depredation on private crop lands adjacent to the burned area would be expected to be unchanged as animals chose forage sources as well as thermal and hiding cover.

4.4.5 **Recreation and Visual Resources:** Impacts to dispersed recreation activities would be insignificant. In the event that fencing activities occur during game hunting seasons, any game species close to the activities would be temporarily disturbed.

Visual resources within and adjacent to the proposed action would be unchanged from prefire conditions with shrub cover removed by the 1999 fire.

4.4.6 **Cultural Resources:** A Class III cultural resources survey was conducted prior to seeding following the 1999 fire rehabilitation. Recorded sites along proposed temporary fencelines will be reflagged and avoided as appropriate. A survey for paleo resources was also conducted prior to surface disturbing activities following the 1999 fire. Paleo resources located, depending on the nature and extent of the fossil locality, would also be appropriately protected during fence construction.

4.4.7 **Special Status Plants:** Special Status plant species would not be affected since no activity is planned within known or suspected habitats. In the event habitats or plants are discovered during temporary fence construction, mitigation actions would be implemented to avoid impacts which would contribute for the need for listing.

4.4.8 **Areas of Critical Environmental Concern:** Impacts to the adjacent Oregon Trail National Historic District and the proposed Keeney Pass segment of the Oregon Trail ACEC would be unaffected by temporary fencing and recovery of residual vegetation.

4.5 **No Action Alternative:** Consequences of implementing the no action alternative, exclusion of livestock from the 5,544 acre Lincoln Bench Pasture as required by policy, would result as summarized in the following sections.

4.5.1 **Vegetation, Soils and Watersheds:** Annual species and noxious weed species would continue to dominate many sites within the burn with a mat of cheatgrass and other annual species seed. The potential for invasion of these sites by noxious weeds would remain high. Potential for repeated wildfire spread would be high. The cumulative effects of past and future

wildfire adjacent to this burn would cause a continued loss of vegetative diversity and structure which would accelerate with no action.

Temporary exclusion of livestock from Lincoln Bench Pastures would allow recovery of residual desirable species, including those planted following the 1999 Lincoln Bench and the 2001 Lytle fires, without impacts from sheep and cattle grazing.

4.5.2 **Noxious weeds:** Many sites would be susceptible to domination by noxious weeds found in and adjacent to the area burned. Medusahead is a competitive annual species with little forage value and the ability to further limit potential for successful seeding of desirable species once established. Scotch thistle, rush skeletonweed, and whitetop are aggressive and highly invasive species. With little competition from desirable perennial grasses and shrubs, these weeds may dominate the burn area and adjacent rangeland in the long term. Limiting weed inventory to prefire levels would delay the timely treatment to prevent the spread and invasion of weed species into niches opened by the Lincoln Bench II Fire.

4.5.3 **Livestock Grazing:** Livestock would not be allowed to graze the burn area through two growing seasons as required by BLM policy. Short term exclusion of livestock from Lincoln Bench Pasture to provide opportunities for recovery of fire impacted vegetative species would result in the loss of an estimated 387 AUM's for cattle use and 100 AUM's for sheep use annually. Long term benefits to livestock production potential would not be realized as the density of desirable perennial vegetation would not increase and likely would continue to decline with more frequent fire.

4.5.4 **Wildlife:** Wildlife habitat and forage quality for big game and sagebrush dependent species would not improve. The loss of shrub habitat which occurred as a result of the 1999 fire would negatively impact big game and sagebrush dependent species over the long term as Wyoming big sagebrush is slow to reestablish within the 10 inch precipitation zone following fire. Wyoming big sagebrush established with seeding during fall 1999 were removed by the the Lincoln Bench Fire. Depredation of adjacent private crop-lands by big game species would increase and be redirected as travel corridors of animals change.

4.5.5 **Recreation and Visual Resources:** The return of game species for hunting may be somewhat delayed. Increased dominance by undesirable annual and weed species would hinder efforts to improve game species habitat in the burned area.

Preferred perennial vegetation would not be restored in the short nor long term with the exception of those vegetation communities which would recover with protection from livestock grazing. There would be a significant delay in returning the area to an acceptable visual setting of some type of vegetative cover with structure similar to the natural setting.

4.5.6 **Cultural Resources:** There would be no effect to cultural resources from mechanized equipment as a result of the limited rehabilitation alternative, however surface disturbance may be greater long term from livestock trampling and erosional factors without vegetation to provide surface stability. Similarly, there would be no effect to fossil resources as a result of rehabilitation actions; however, unauthorized collection and surface disturbance may be greater from livestock trampling and erosional factors without vegetation to provide surface stability.

4.5.7 **Special Status Plants:** No special status species or their habitat would be directly affected. However, as the area may be invaded by increasing numbers of noxious weeds, a much larger source of undesirable seed would be available for invasion into the nearby special status plant species habitat. Similarly, an increased dominance by annual species would increase fine fuel loading and the risk of larger future fires affecting nearby special status plant habitat.

4.5.8 **Areas of Critical Environmental Concern:** Impacts to the adjacent Oregon Trail National Historic District and the proposed Keeney Pass segment of the Oregon Trail ACEC would be unchanged from current conditions.

4.6 **Adverse Effects:** Unavoidable adverse effects from implementation of the proposed action, nonnative seeding, limited rehabilitation or no action alternative are limited to those impacts to soil and vegetation function described in the text above.

4.5 **Short-term and Long-term Impacts:** Short-term impacts to soil and vegetation resources during seeding operations and construction and removal of approximately 2.5 miles of temporary fence would be offset by long-term benefits to upland vegetation community function consistent with standards for rangeland health and guidelines for livestock management. Long-term control of the spread and introduction of noxious weed species would also occur with increased inventory and treatment. Long-term benefits resulting from the reduction of fine fuels of annual species would limit spread of future fire in the burned and adjacent areas.

4.6 **Irreversible or Irretrievable Commitment of Resources:** In the event of limited soil moisture for seeding establishment in the springs of 2003 and/or 2004 or other causes of poor seeding establishment, no irreversible or irretrievable loss of resources would be committed since annual species would return to provide vegetation cover to the site. Similarly, should the proposed fence not function as expected to protect recovering vegetation resources or should it have unforseen negative impacts, it could be removed or redesigned with no irreversible or irretrievable commitment of resources.

5 **List of Preparers/Reviewers:**

Steve Christensen	Rangeland Management Specialist
Ron Rembowski	Rangeland Management Specialist
Mitch Thomas	Rangeland Management Specialist

Tom Hilken	Rangeland Management Specialist;
"	Planning and Environmental Coordinator
Jim Johnson	Wild Horse Specialist
Bob Alward	Outdoor Recreation Planner, Wilderness
Jean Findley	Botanist
Diane Pritchard	Archaeologist
Shaney Rockefeller	Hydrologist/Soil Scientist
Al Bammann	Wildlife Biologist
Cynthia Tait	Fisheries Biologist
Lynne Silva	Range Technician, Weeds
Jon Freeman	Realty Specialist
Tom Dabbs	Acting Field Manager, Malheur Resource Area

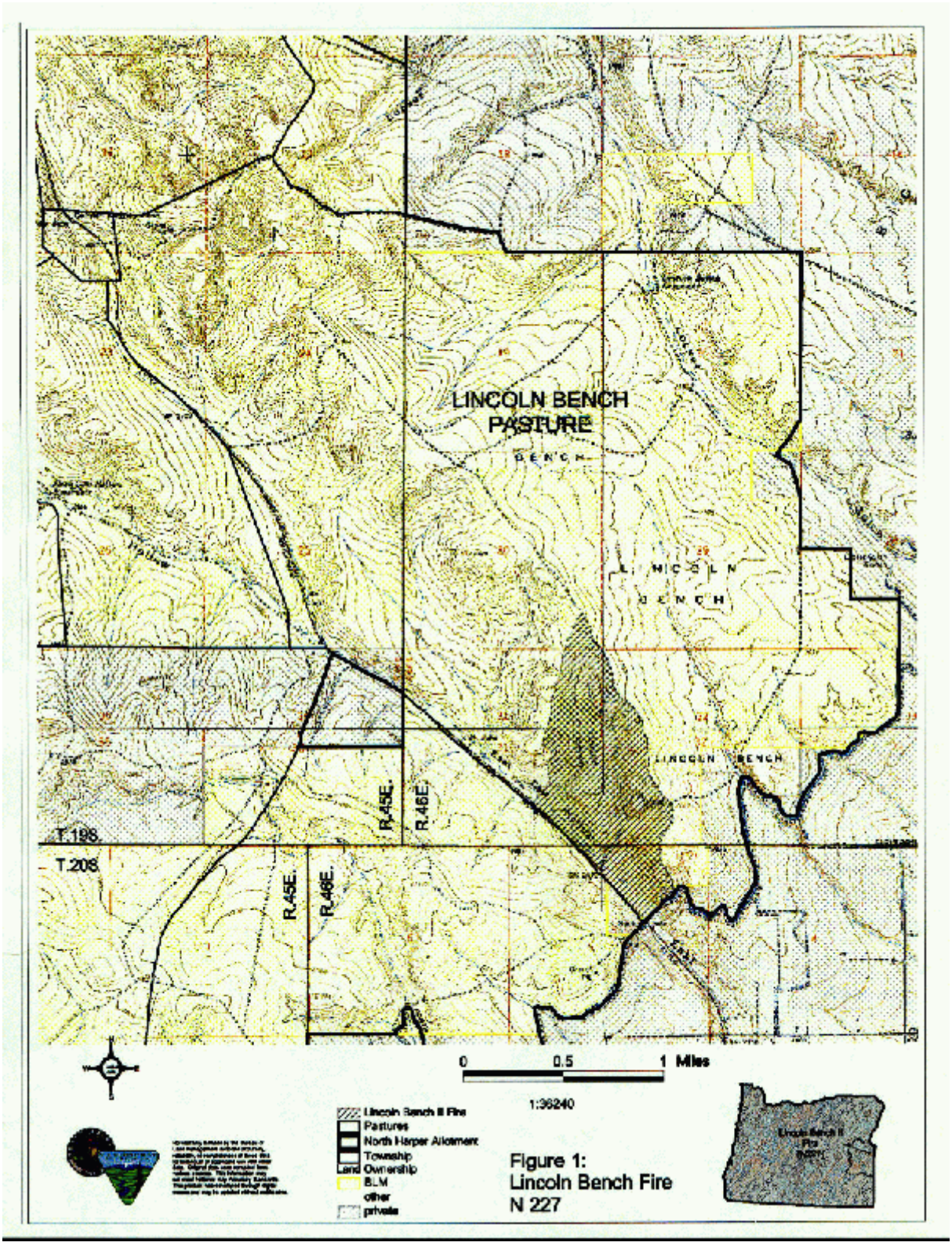
6 **List of Agencies, Organizations, and Persons to Whom Copies of the EA are Sent:**
Livestock operators; North Harper Allotment
Hal Shepherd (Northwest Environmental Defense Center); Interested Public
Walt Van Dyke, Oregon Department of Fish and Wildlife
Albert Teeman, Tribal Chairperson, Burns Paiute Tribe
Edward Potaws, Chairman, Confederated Tribes of the Umatilla Reservation

A file search completed August 2, 2002, identified no additional requests by members of the public to be considered an interested public for North Harper Allotment.

7 **Literature Cited:**

USDI-BLM 1984. Southern Malheur Rangeland Program Summary (RPS). U.S. Bureau of Land Management, Vale District, Oregon. 24 p.

USDI-BLM. 2000. Proposed Southeastern Oregon Resource Management Plan and Final Environmental Impact Statement (April 2001). U.S. Bureau of Land Management, Vale District, Oregon. 3 v.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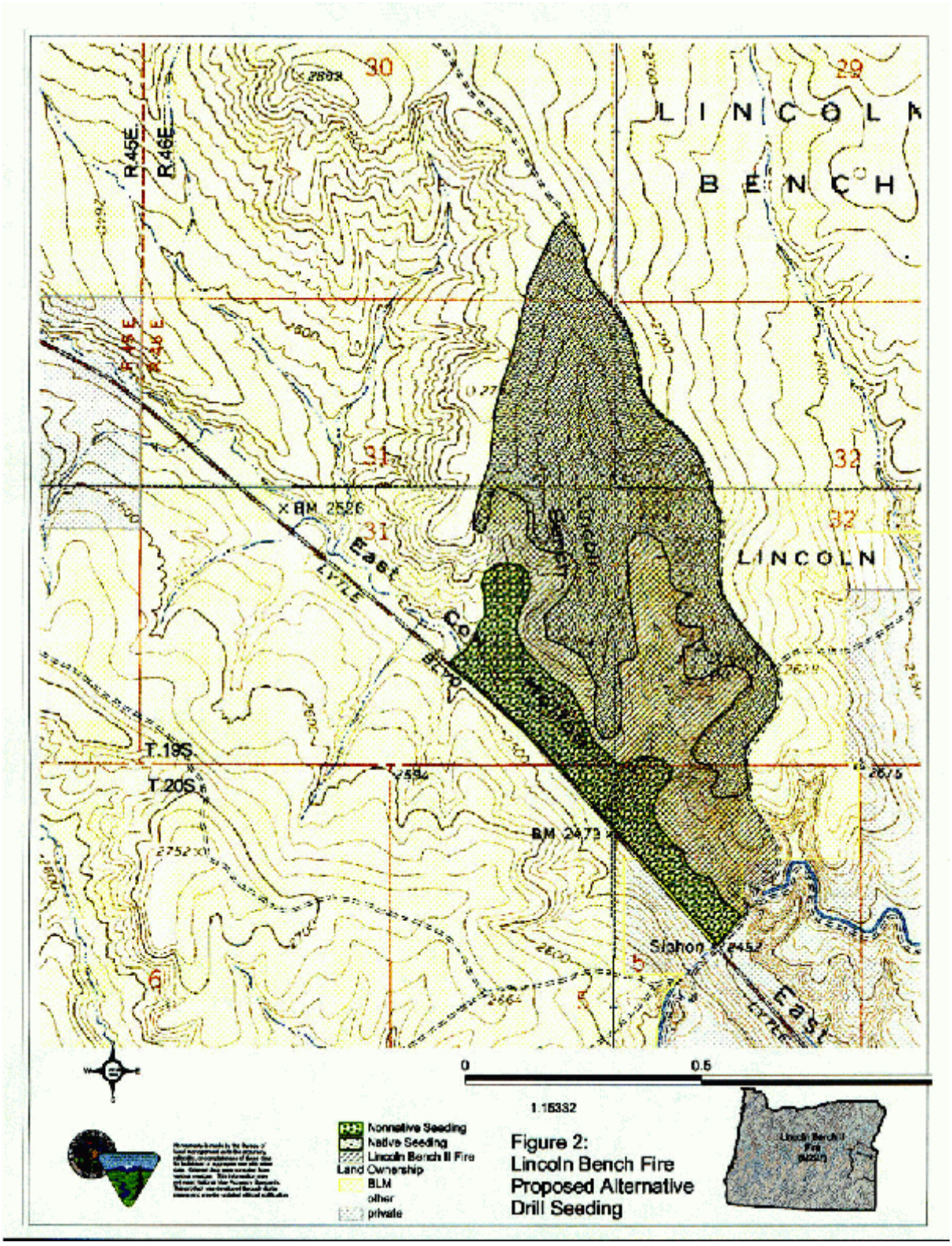
Lincoln Bench II Fire
Pastures
North Harper Allotment
Township
Land Ownership
BLM
other
private
Figure 1:
Lincoln Bench Fire
N 227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Nonnative Seeding
Native Seeding
Lincoln Bench II Fire
Land Ownership
BLM
other
private
Figure 2:
Lincoln Bench Fire
Proposed Alternative
Drill Seeding

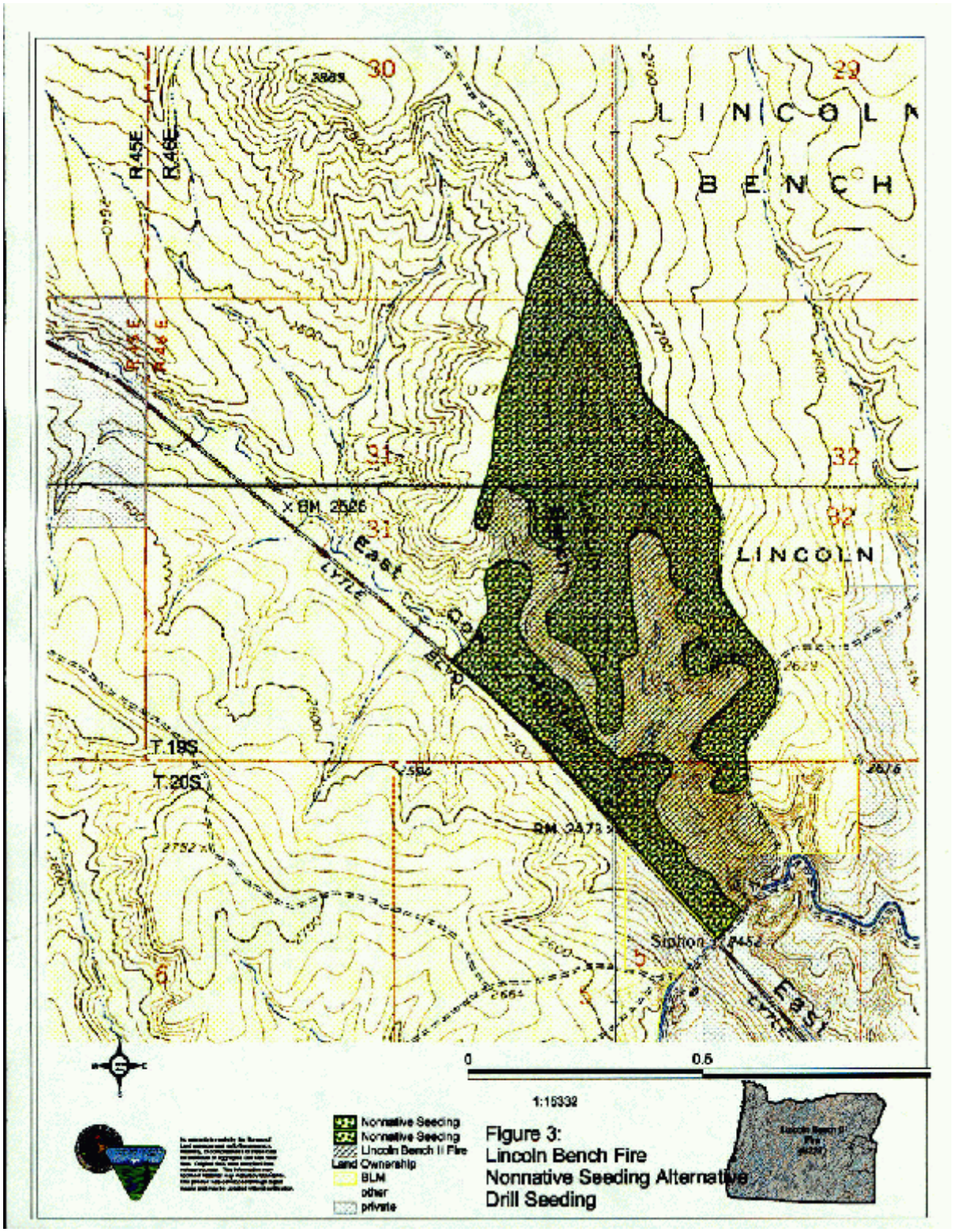

Figure 3:
Lincoln Bench Fire
Nonnative Seeding Alternative
Drill Seeding

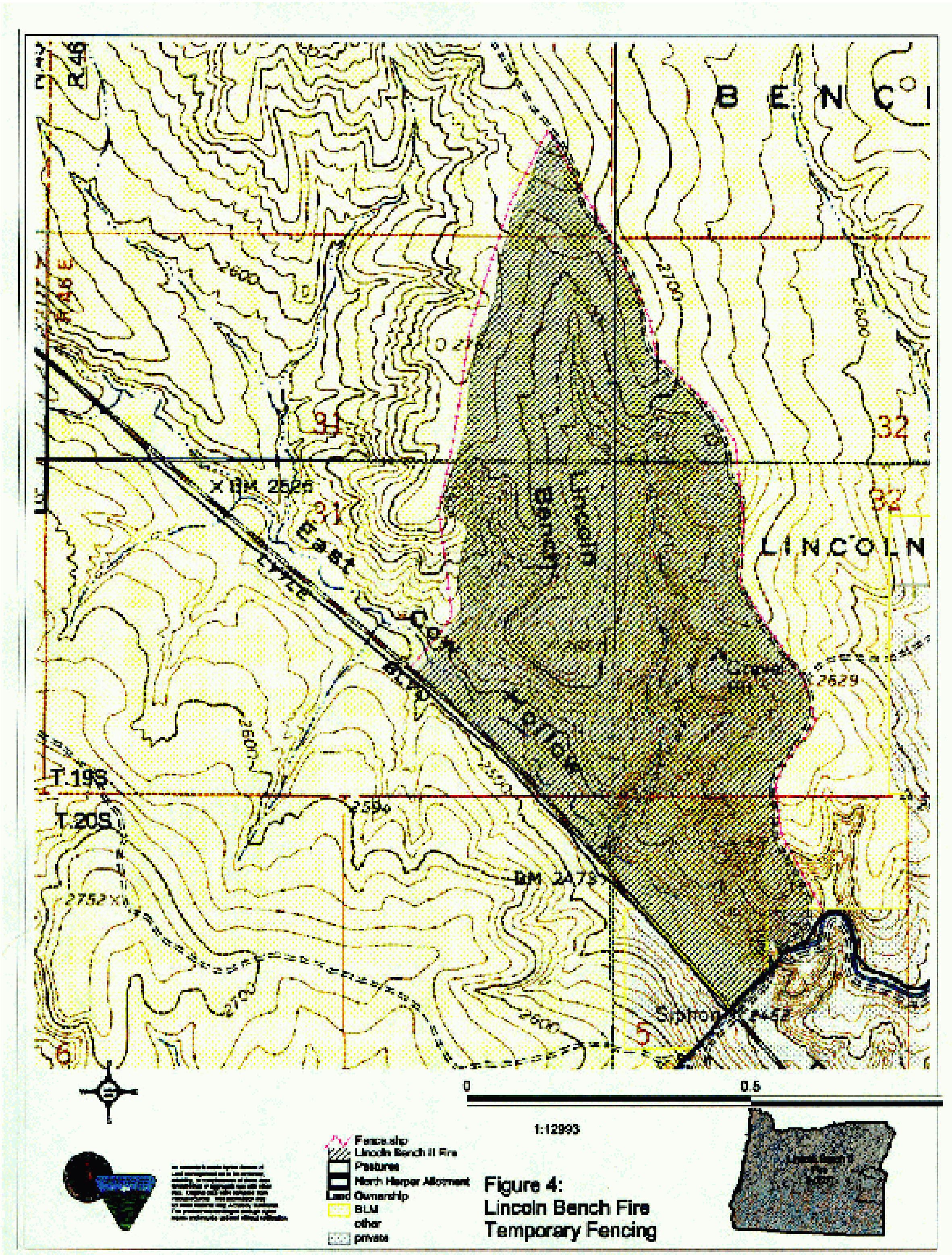

Figure 4:
Lincoln Bench Fire
Temporary Fencing