U.S. Department of Interior
Bureau of Land Management
Lakeview District

Tool Box Complex Fire (M262)

BURNED AREA EMERGENCY STABILIZATION AND REHABILITATION (ESR) PLAN ENVIRONMENTAL ASSESSMENT

(Tool Box, Silver, and Winter Fires)

EA#OR-010-2002-08

January 2003

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FINDING OF NO SIGNIFICANT IMPACT AND DECISION RECORD

Introduction

The Lakeview District, Bureau of Land Management (BLM) has analyzed a proposal and two alternatives for emergency rehabilitation of burned lands under BLM administration associated with in the Toolbox Fire Complex within the northwest portion of the Lakeview Resource Area. The fire complex includes the Tool Box and Silver Fires which burned approximately 8,015 acres of BLM land, 51,284 acres of Forest Service land, 52 acres of state land, and 27,443 acres of private land and the Winter Fire which burned approximately 882 acres of BLM public land, 23,915 acres of Forest Service land, 51 acres of state land, and 9,051 acres of private land.

Decision

After consideration of the analysis of impacts and mitigating measures of the proposed action and alternatives, my decision is to implement the proposed action as follows: actively rehabilitate BLM portions of the Tool Box, Silver, and Winter fire areas by reseeding vegetation, stabilizing soils, and protecting the area from further disturbance so that natural revegetation can occur. This includes reseeding, planting tree and shrub seedlings, treating juniper stands, constructing about 7.5 miles of new fences, reconstructing about 3.5 miles of existing fencing, resting the burned area from grazing, and monitoring.

Rationale

The action will provide a perennial vegetation cover of grasses, shrubs, and trees. These species will compete with cheatgrass and other exotic annuals, discourage noxious weed invasion, and reduce soil erosion. The result would be a more diverse vegetation community. The construction of new protection fence/pasture fence and reconstruction of existing allotment boundary fencing are essential to protect seeded areas during germination and establishment and for continued management of these areas.

Determination

I have reviewed this plan and NEPA compliance record and have determined that the proposed project is in conformance with an approved land use plan. It is my decision to implement the Tool Box Complex Fire ESR Plan as outlined in the attached document. On the basis of the information contained in the EA and all other information available, it is my determination that none of the alternatives analyzed constitutes a major Federal action affecting the quality of the human environment. Therefore, an Environmental Impact Statement (EIS) is unnecessary and will not be prepared.

Because of the limited time window to implement the rehabilitation actions this winter and the high potential for further resource damage, this decision is being placed into full force and effect in accordance with 43 CFR Part 4100.3-3(b), effective January 16, 2003. Any party adversely affected by this decision may appeal no later than February 14, 2003 in accordance with the provisions of 43 CFR Part 4.4.

Thomas E. Rasmussen

Thomas E. Rasmussen, Manager
Lakeview Resource Area

1/15/03
Date

I. INTRODUCTION/PURPOSE AND NEED

A. Introduction

On July12, 2002 the Bureau of Land Management (BLM), Lakeview District, experienced a high frequency of lightning strikes from numerous storm cells resulting in many wildfires. This ESR plan and environmental assessment will deal with BLM managed public land burned by three of these wildfires: Tool Box, Silver, and Winter Fires.

1. The Tool Box and Silver Fires were ignited by lightning and eventually burned approximately 8,015 acres of BLM public land, 51,284 acres of Forest Service land, 52 acres of state land, and 27,443 acres of private land. The fires were declared controlled on October 1, 2002. At the time of the fire, the land supported plant communities of: a) Ponderosa pine/Juniper/bitterbrush intermixed with a juniper/bitterbrush/bunchgrass plant association. Idaho fescue, bluebunch wheatgrass, and bottlebrush squirreltail are some of the bunchgrasses that are present.

2. The Winter Fire was also ignited by lightning and burned 882 acres of BLM public land, 23,915 acres of Forest Service land, 51 acres of state land, and 9,051 acres of private land. At the time of the fire, the land supported plant communities of juniper/sagebrush/bunchgrass and ponderosa pine/sagebrush/bunchgrass.

B. Purpose and Need

The purpose of this project is to actively rehabilitate portions of the burned areas of the Tool Box Complex Fires by restoring vegetation and stabilizing the sites, and to protect the majority of the burned area so that natural revegetation can occur.

Much of the area burned by the Tool Box Complex Fires had been invaded by cheatgrass, a nonnative species. Rehabilitating portions of the burned area with seedings is necessary to ensure a perennial plant cover and long-term ecosystem integrity and productivity. In those areas where ponderosa pine/ bitterbrush stands existed and were burned by high intensity flames, seedlings of both species could be planted for plant community reestablishment and soil stabilization. Additionally, noxious weeds, such as medusahead rye are increasing in the area and opportunities for weed establishment would be much greater without planting competitive desirable vegetation. If the burned area is not treated, cheatgrass and noxious weeds would likely dominate the plant community. The likelihood of the area burning again is greater with increased levels of cheatgrass. Adjacent areas of sagebrush habitat are also at a greater risk of fire due to the possible increased levels of flammable cheatgrass components.

II. RELATIONSHIP TO PLANNING

The High Desert MFP, (1983) is the current land use plan for the area. This plan is silent on the issue of wildfire rehabilitation. However, the fencing component of the proposed action is considered within the MFP and the Lakeview Grazing Management FEIS/ROD (1982).

The Carlson-Foley Act (Public Law 90-583), as well as state and county laws, make the Federal government responsible for control of weeds on Federal land and provides direction for their control. The Lakeview District operates under the weed protocols set forth in the following documents: Vegetation Treatment on BLM Lands in Thirteen Western States Final Environmental Impact Statement and Record of Decision (1991), and the Supplement to the Northwest Area Noxious Weed Control Program Final Environmental Impact Statement and Record of Decision (1987), and the Integrated Noxious Weed Control Program Environmental Assessment (1994). The proposed action is in conformance with these land use plans and the BLM Emergency Stabilization and Rehabilitation (ESR) Plan (1998).

III. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

A. Proposed Action (preferred alternative)

1. REVEGETATION

A combination of seedings is planned for the Tool Box Complex fires. Two seed mixes have been developed to be applied to different areas on the fires. See Table 1 for species/rate of application. See attached maps for locations of revegetation project areas.

a. Mix #1 will be applied by broadcasting from all terrain vehicles (ATV=s) to approximately 1,400 acres of cheatgrass/juniper invaded land burned by the Tool Box Fire in the Dead Indian-Duncan Allotment #709. Mix # 1 will also be applied aerially with a helicopter to approximately 900 acres that burned with a high intensity: 250 acres on Dead Indian Rim burned by the Tool Box Fire in the Dead Indian-Duncan Allotment #709, 40 acres in the Silver Creek canyon and 250 acres of uplands burned by the Silver Fire in the Silver Creek-Bridge Creek #700 and Silver Creek #713 Allotment, and 360 acres of steep, rugged terrain on Monument Rock burned by the Winter Fire in the White Rock #416 Allotment.

b. Mix #2 will be applied by broadcasting from ATVs to approximately 200 acres of cat lines and bull dozed safety zones scattered throughout the complex of fires. Funding for Mix #2 seed comes from Fire Suppression funds.

c. Ponderosa pine and bitterbrush seedlings could be planted on approximately 850 acres where existing ponderosa pine/bitterbrush stands were burned by high intensity flames, destroying possible seed sources in the soil. ESR funding is not requested for purchase and planting of seedlings at this time.

Table 1 – Seed Mixes

MIX # 1 SPECIES	**lbs/acre**	**MIX # 2 SPECIES**	**lbs/acre**
Wyoming Big Sagebrush	1.0	Crested Wheatgrass	3.0
Great Basin Wildrye	1.0	Great Basin Wildrye	1.0
Bluebunch Wheatgrass	1.0	Bluebunch Wheatgrass	1.0
Bottlebrush Squirreltail	0.5	Sand Dropseed* *had in storage	0.25
Idaho Fescue	1.0	Forage Kochia	0.5
Sand Dropseed* *had in storage	0.25	Alfalfa	.25
Sandberg=s bluegrass* *had in storage	0.5	Triticale	0.25
Lewis Flax	0.25		
Alfalfa	0.5		
Triticale	0.25		
TOTALS	**6.25**		**6.25**

2. VEGETATION TREATMENTS

a. Dense populations of juniper will be treated mechanically or with prescribed burning to reduce the encroachment on springs, riparian areas, and desirable native plant communities and to reduce fuel loads in the complex of fires. ESR funding is not requested for juniper treatment. See attached maps for the areas identified for juniper treatment.

3. STRUCTURES

a. Construction of approximately 7.5 miles of new 3-strand barbed wire protection fence will be required to provide the natural resources rest from livestock grazing for two growing seasons during the natural recovery process of the burned areas in the Squaw Lake #418 and Dead Indian-Duncan #709 Allotments. The new fences could be retained as a pasture fence to continue management following the rest cycle from livestock grazing. See attached maps for proposed fence locations.

b. Repair of approximately 3.5 miles of existing fences will be required to provide the natural resources rest from livestock grazing for two growing seasons during the natural recovery process of the burned areas throughout the complex of fires.

4. SURVEY AND MONITORING

a. Cultural and botanical resource surveys would be completed on the proposed 7.5 miles of new protection fence prior to any fence construction taking place.

b. To discourage introduction of noxious weeds into the Tool Box Complex rehabilitation areas, equipment used for seeding (ATVs and other vehicles) would be cleaned of vegetative material (seed, debris, etc.) before working on-site. All seed purchased for this fire rehabilitation project would be subjected to an all states noxious weed test by a certified seed testing facility. No noxious weed seed would be tolerated. If any noxious weed seed is found the lot would be rejected. Noxious weeds could be introduced at any time, therefore areas of high susceptibility would require repeat inventorying, treatment, and monitoring on an annual basis. Inventorying for noxious weeds would begin FY 2003 and continue through FY 2004.

c. The majority of the burned areas of the affected grazing allotments would be rested from livestock grazing for two growing seasons. Monitoring of the rehabilitation areas in the Tool Box Complex fires would be monitored for a minimum of three growing seasons to determine if rehabilitation objectives are being met. Rangeland monitoring will include established upland trend plots and use supervision. Additional photo points will be set up in seeding areas to assess the success or failure of seedings. Photo points and aerial photo interpretation will be used to measure erosion. Soil loss and changes in drainages would be indicators of increased erosion.

B. Alternatives

1. NO ACTION–Continue Current Management

No public land would be seeded. There would be no protective fences constructed, allowing livestock to graze the burned area during the natural recovery period of the vegetation. No noxious weed, cultural, or botanical resource inventories would be completed.

2. LIMITED REHABILITATION–No Seeding; Protection Fence Only

This alternative is the minimum necessary to protect the burned areas of the Tool Box Complex fires while natural recovery of vegetation takes place. The mileage of new and repaired fencing would be the same as stated in the proposed action. Noxious weed, cultural, and botanical resource inventories would be completed.

3. ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED ANALYSIS

Two additional alternatives were considered, but eliminated from detailed analysis:

a. Seed with crested wheatgrass only; install protection fences. This alternative was not analyzed because Bureau policy provides direction towards using native species to the extent possible and use mixtures of seed, regardless if the species is native or non-native.

b. Remove all livestock grazing from the entire affected allotments for two or more growing seasons. No seeding or fencing would occur. This alternative was eliminated because the threat of invasive annual vegetation and noxious weeds still exists, even without cattle grazing. There is also an impact to the economic well being of the affected permittees if cattle grazing was removed for at least two growing seasons.

IV. AFFECTED ENVIRONMENT

The following resource values would not be affected by the proposed action or any of the alternatives: air quality, Area of Critical Environmental Concern, prime or unique farmlands, floodplains, American Indian religious concerns, hazardous or solid wastes, water quality, wetlands, wild and scenic rivers, wild horses, low income/minority populations, paleontological resources, lands, minerals, and wilderness. Those resources which are not affected will not be discussed further in this document. The following critical elements would be affected by the proposed action or alternatives.

1. Cultural Resources

The area of the Tool Box Complex Fires is within the Northern Great Basin cultural area. Historically the area could have been used by Northern Paiute People from several areas. The most likely groups to have used the area are the Yahuskin Paiute. Very little cultural resource survey work has been done in the immediate area of the proposed project. Survey work on small waterholes has been completed within the area. Several small to large lithic scatters have been located. Within the region, considerable work has been completed as part of university research projects. The results of work by the University of Oregon indicate that some cultural resource sites are likely in the area. It is further expected that these sites will potentially range in time from less than 100 years to 10,000 years before the present. Small campsites and lithic scatters are the most likely types of site in the area. Rock cairns, burials, hunting blinds and stone quarry sites may also be found but are less likely. No current cultural use of the area by Native American is known.

Historic resources are limited to Civilian Conservation Corps projects. It does not appear that cultural survey will find significant euro-american resources within the burn area.

2. Noxious Weeds

Noxious weed sites are widespread in the areas of the Toolbox, Winter, and Silver Fires. Primarily the weed sites are small infestations of medusahead rye on soils with greater clay content. Mediterranean sage and Canada thistle also occur. Potential for invasion into the burned areas by medusahead is high due to its presence along most roads in the Dead Indian Rim and Duncan Creek areas.

3. Special Status Plants

No known Special Status Plant Species occur within the Toolbox, Silver or Winter Fire areas. Aerial or mechanical seeding would therefore have no effect. Although not categorized as Special Status Plant Species, there are several cultural plants species, such as wapato (*Sagittaria latifolia*, S. *cuneata*), bitterroot (*Lewisia rediviva*), yampah (*Perideridia* spp.), serviceberry (*Amelanchier alnifolia*), Indian plum and chokecherry (*Prunus* spp.), mountain mahogany (*Cercocarpus ledifolius*), and *Lomatium* spp. are present on the lithic soils and in and around riparian areas such as Silver Creek and Duncan Creek and around La Brie Lake.

4. Soils

The area burned by the Tool Box Fire is dominated by weathered basalt and andesite soil material and is similar to the Woodchopper and Rogger soil series. The soil series are characterized by dry summer, loam over clay loam textures with shrink swell weathered profiles, and grass savanna nutrient flows. There are pockets of deep, well-drained soils,

which support Juniper woodlands.

The area burned by the Silver Fire is dominated by soils that are lithic argixeroll, characterized shallow, dry summer, clay loam in low sagebrush areas. Silver Creek canyon is dominated by cobbled, shallow soils and basalt rim rock.

The area burned by the Winter Fire near Monument Rock is dominated by shallow rocky soils on steep slopes. Wind and water erosion are a concern on all three fires. The water erosion hazard can reach the moderate range. Revegetation of the burned area is critical. The wind erosion hazard is at least moderate to high until vegetative cover can be established.

5. Vegetation

The vegetation in the area burned by the Tool Box Fire was dominated by ponderosa pine and Wyoming big sagebrush with perennial bunchgrasses including Idaho fescue and bluebunch wheatgrass. Pockets of bitterbrush with bluebunch wheatgrass were present. Much of the perimeter of the burn was dominated by stands of low sagebrush associated with Idaho fescue, Sandberg=s bluegrass, and bluebunch wheatgrass. Western juniper had encroached onto many of the Wyoming big sagebrush sites.

The vegetation in the area burned by the Silver Fire was dominated by ponderosa pine and big sagebrush with perennial bunchgrasses including Idaho fescue, western needlegrass, bluebunch wheatgrass and bottlebrush squirreltail. Bitterbrush was scattered throughout. Low sagebrush communities occurred mainly near the BLM/Forest Service boundary. Mountain mahogany was present on slopes adjacent to Silver Creek. Riparian vegetation included alder, willows, and sedges. Other associated shrubs included serviceberry, snowberry and rabbitbrush. Western juniper had encroached in much of the area.

The vegetation in the area burned by the Winter Fire was dominated by Wyoming big sagebrush with a perennial bunchgrasses including Idaho fescue and bluebunch wheatgrass. Sandberg bluegrass and Thurbers needlegrass were also present on north facing slopes. Western juniper had encroached in the higher elevations near Monument Rock and north of the town of Summer Lake.

6. Watershed

The Silver and Duncan Creek watersheds were the main watersheds effected by the wildfires. There is extensive burned areas in the watersheds above the BLM managed lands. This will increase the occurrence for a higher than normal peak flows and sediment loads in the effected channels.

7. Riparian Zones

The only riparian zone is Silver Creek that was burned by the Silver Fire. Riparian vegetation will most likely recover naturally. Sediment from higher elevations is a concern.

8. Wildlife (includes Special Status Species)

The area identified within the Tool Box Complex fires is home to many wildlife species. Special status species known to inhabit the area include the Northern bald eagle (*Haliaeetus leucocephalus*), Peregrine Falcon (*Falco peregrinus*), Ferruginous Hawk (*Buteo regalis*), Burrowing Owl (*Speotyto cunicularia*), and the Greater sage grouse (*Centrocercus urophasianus*). The Northern goshawk (*Accipiter gentillis*), White-headed woodpecker (*Picoides albolarvatus*) and pygmy rabbit (*Brachylagus idahoensis*) may also be occasional visitors or occur in the area. In addition to special status species, there are several wildlife species that are of high public interest. These include mule deer (*Odocoileus hemionus*), elk (*Cervus elaphus*), pronghorn antelope (*Antilocapra americana*), and bighorn sheep (*Ovis canadensis*).

Three bald eagle nests were consumed by the wildfire. Two of these occur on Fremont National Forest Lands on Winter Rim and one on BLM lands located on Dead Indian Rim. The nest on BLM land was not active at the time of the fire. Bald eagles also use much of the surrounding area for foraging and roosting. Sage grouse are common on the sagebrush hills within the area. Much of the sage grouse habitat within the area did not burn or burnt in a mosaic pattern due to lighter concentrations of fuels. Habitats for the other special status species were also largely unaffected

except for that of the goshawk and white-headed woodpecker. Their habitats consist mostly of ponderosa pine forests and were mostly consumed by the fire.

Habitats for deer and elk were partially consumed by the wildfires. Much of this habitat was winter and transitional range. Forage is still available, but in lesser amounts than before the fire. Spring and summer forage is expected to increase in one to two years after the fire, but winter forage from shrubs may take much longer to recover. Cover from partially consumed trees still occurs over much of the forest and woodlands consumed by the fires. Pronghorn habitat remains largely unchanged, due to the open areas of low sage that they inhabit and the mosaic pattern of the burn in these areas. Bighorn sheep habitats on BLM lands within the fires are limited to a few small scattered parcels. A few of these parcels were partially consumed by the fire, but bighorn habitats within these areas will probably be improved due to the reduction in junipers and improved forage quality following the fires.

9. Fisheries

Native red-band trout and planted trout migrating from Thompson Reservoir occur in Silver Creek on BLM public land. The habitat in the stream is adequate, but limited because of flow control out of Thompson Reservoir. Increased quality pool habitat and less sediment would improve conditions for the trout.

10. Livestock Grazing Management

The Tool Box Complex Fires burned in portions of the following allotments: White Rock (#416), Squaw Lake (#418), Silver Creek-Bridge Creek (#700), Dead Indian-Duncan (#709), and Silver Creek (#713). Table 2 shows a summary of these allotments with the affected permittee, licensed AUMs and season of use. Table 3 shows a summary of the size (acres) of each allotment, acres burned in each allotment by each fire, and the percentage of the allotments burned.

11. Recreation

The OHV designation for all three fires is Aopen@. The majority of the recreation use within the area of the Tool Box fire is hunting and accessing adjacent Forest Service lands via rough dirt roads. In the vicinity of the Silver Fire, the primary recreation use is hunting in the fall, and fishing, camping and hiking throughout the year. A dispersed camping area is located adjacent to the edge of the fire and is accessible by a rough two track road. In the vicinity of the Winter Fire, recreational use is severely limited due to the steepness of the terrain. Some hunting may occur in the lower bench areas.

12. Visual Resource Management (VRM)

The Silver fire is within VRM Class IV. The objective of VRM Class IV is to provide for management activities which require major modification of the existing landscape. The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of attention. However, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating the basic elements of form, line, color, and texture.

Both the Tool Box and the Winter fires occurred in areas rated as VRM Class II and III. The objective of VRM Class II is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual viewer. Any changes must repeat the basic elements of form, line, color and texture found in the predominant natural features of the landscape.

The objective of VRM Class III is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

In the case of all three fires, the fire itself has had the largest visual impact on the landscape. There are varying degrees of contrast between the form, line, color and texture of the burned and unburned areas. In addition, firefighting efforts have created visual impacts, particularly to the element of line, by the creation of two tracks and cat lines.

The eastern edge of the Toolbox and Winter fires is located immediately adjacent to US Highway 31, which has been designated as the Oregon Outback National Scenic Byway. The byway designation itself does not specify a particular VRM class for management of its scenic value.

V. ENVIRONMENTAL IMPACTS

Address cumulative effects of the proposed action and alternatives. Cumulative effects are the environmental impacts resulting from the incremental impacts of a proposed action when added to other past, present, and reasonably foreseeable future actions, both Federal and non-Federal. Cumulative impacts can result from individually minor, but collectively significant actions taking place over a period of time.

A. Proposed Action

1. Cultural Resources

Aerial and broadcast seeding would have no significant impact on cultural resource sites. If found within the project area, cultural resource sites such as lithic scatters could be significantly impacted by fence building activities. Breakage, vertical and horizontal movement and mixing of cultural deposits could be expected. These areas would be avoided by a cultural resource survey marking the sites on the ground. However, collection of surface artifacts from the marked sites could be a significant problem. If the diagnostic artifacts are removed from the sites as they are located, this will not be a problem. Cumulative impacts would be possible damage to cultural resource sites if found within the project area.

2. Noxious Weeds

Aerial seeding activities would have no effect on noxious weeds already present. Rehabilitation of dozer lines, fence construction, and ATV seeding activities would have little potential of introducing new weed species if equipment is inspected and cleaned and the seed is certified weed free, as per the protocols outlined in the Proposed Action. All equipment and personnel involved in the rehabilitation effort would avoid traveling through or working in areas where medusahead is present when possible. Equipment that must travel through or work in infested areas would be cleaned on site, prior to moving to an uninfested area to continue working. ATV seeding, dozer line rehabilitation, and fence building activities would create areas of disturbed soil where weed seeds transported from outside the rehabilitation area by people, animals, and natural forces could establish. Cumulative impacts of rehabilitation activities in the burned areas would be minimal. Establishment of a desirable perennial plant cover from seeding projects would create competition for the weeds which would decrease their likelihood of establishment.

Table 2.

Allotment Name & Number	*Permittee*	*Licensed AUMS*	*Season of Use*
White Rock #416	Elder Ranch, Inc.	10	05/01 - 09/30
Squaw Lake #418	Dr. Martin Pernoll	834	9/15-12/31
Silver Creek-Bridge Creek #700	Lorraine Sphar	303	4/21-6/30
Dead Indian-Duncan #709	Fernette McDowell Martin Murphy	231 355	4/15-10/23 4/15-8/31
Silver Creek #713	JR Simplot Trust	200	4/15-5/15

Table 3.

TOOL BOX FIRE					
Allotment Name & Number	Size of Allotment (Acres)			Acres Burned	% of Allotment Burned
	Public	Other	Total		
Squaw Lake #418	43,269	520	43,789	106	2.5%
Dead Indian-Duncan #709	18,790	2,420	21210	7046	33.0%
Total				7152	

Table 3 (cont.)

SILVER FIRE					
Allotment Name & Number	Size of Allotment (Acres)			Acres Burned	% of Allotment Burned
	Public	Other	Total		
Silver Creek-Bridge Creek #700	6,645	265	6910	42	0.6%
Silver Creek #713	2,785	870	3655	272	7.4%
Total				314	

WINTER FIRE					
Allotment Name & Number	Size of Allotment (Acres)			Acres Burned	% of Allotment Burned
	Public	Other	Total		
White Rock #416	565	438	1003	112	11.2%
Squaw Lake #418	3,269	520	3789	18	0.04%
Total				130	

3. Special Status Plants

The dispersal of native seeds and the planting of shrub/tree seedlings for rehabilitation would currently have no effect on Special Status Plants. Cumulative impacts of the proposed action would favor recovery of overall plant communities.

4. Soils

Soils recover when vegetation recovers. Post-fire re-vegetation with the proposed seed mixes of sagebrush, grasses, and forbs would reestablish a well-rooted thatch roof, which holds the soil in place against the erosive forces of wind and water motion. The seed mixes would reestablish plant communities with diverse vegetation cover; sustain vegetation litter, and detritus nutrient cycles for ample biological production and diversity. The seeding would also buffer the lands against weed infestations. Fence building activities would create areas of disturbed soil, but would protect the burned bare ground from further disturbance by livestock hoof action. There would be no known cumulative impacts from the proposed action.

5. Vegetation

Seeding the project areas would ensure the establishment of a perennial vegetation cover including trees, shrubs, grasses and forbs providing structural diversity. Annual cheatgrass, medusahead rye, other annuals, and possibly noxious weeds would compete strongly during the first three years following the fire. The plant species in mix #2 were selected for drought tolerance germination characteristics with the potential to outcompete annual cheatgrass, medusaheadrye, other introduced annuals, and noxious weeds.

The native seed mix #1 would provide a perennial vegetative cover for soil protection, varied plant community structure, and palatability for wildlife and livestock. Included in the seed mix #1are fire tolerant species which would lessen the influence of future wildfires on this landscape and promote historical fire return interval. Cumulative impacts of the seeding projects would be lessened fire return intervals with established perennial plant species in these burned areas. Longer fire return intervals will allow improved ecosystem function and stability.

6. Watershed

The proposed action for the Tool Box Complex Fires would allow the vegetation in the Silver and Duncan Creeks watersheds to recover and bring infiltration rates and soil storage to pre-burn onditions. The seeding and seedling planting projects would reestablish the perennial plant cover needed for the watershed to perform the functions if capture, storage, and release of moisture. There would be no cumulative impacts, if recovery is allowed to occur.

7. Riparian Zones

Upland soil stabilization is a key to functioning riparian zone, especially after a wildfire. The aerial seeding seedling planting projects for Silver Creek area would assist in establishing a perennial plant cover, therefore, holding soil in place, decreasing any sediment into the creek bed and reservoir. The construction of protective fencing would allow seedings to establish without livestock grazing.

8. Wildlife (includes Special Status Species)

Natural revegetation will occur on many habitats. However, habitats that were intensively burned or areas that were in low ecological condition prior to burning would benefit from seeding. Seeding of both native and non-native plants would help reduce the expansion of exotic plants and noxious weeds through direct competition. Most prey species for special status raptors would not decline under this alternative. Seedings would also provide forage for elk, pronghorn, and bighorn sheep. Exclusion of cattle from burned areas would benefit wildlife by allowing native residual species to recover for two growing seasons. These residual plants would compete with exotic and noxious weeds and reduce their spread. Negative impacts to deer, elk and pronghorn from the proposed fencing can be minimized by using a wildlife friendly design. Positive impacts to wildlife would occur from this alternative.

9. Fisheries

Seeding in the canyon above Silver Creek will reduce sediment loads into the creek, reducing detrimental impacts to spawning gravels. While riparian shrub and herbaceous species should recover adequately along the bank, the over-story pine will be lost. Reestablishing pine in the riparian corridor will provide a continued supply of large wood to promote and protect stream function.

10. Livestock Grazing Management

Livestock grazing would be shifted to unburned pastures within the allotments or to other allotments within the Lakeview Resource Area for two growing seasons with no overall reduction in the number of AUMs available on each allotment.

11. Recreation

In the vicinity of the Silver Fire, hunting opportunities may improve due to the increase in forage from the seeding projects and the decrease in cover. Public land users will continue to access and use the dispersed campsites. Fishing opportunities may decrease in the short term but will increase in the long term as vegetation becomes reestablished along the stream channel. Within the vicinity of the Tool Box and the Winter Fires, the proposed action would have no effect on recreational use.

12. Visual Resource Management (VRM)

The proposed action will meet VRM Class II, III and IV objectives.

B. No Action Alternative

1. Cultural Resources

Under the No Action alternative there would not be impacts to cultural resources.

2. Noxious Weeds

Cheatgrass and noxious weeds, including medusahead rye, would have a very high likelihood of invading the burned areas identified for seeding in the Proposed Action. Undesirable annual grasses would become dominant, creating a landscape of less desirable plant cover and flashy fuel loading.

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3. Special Status Plants

Without seeding, nonnative invasive species would likely dominate the burned areas thus degrading or eliminating potential habitat for Special Status Plants. Cumulative impacts would be wildfires would most likely increase in frequency and size, which would increase the amount of cheatgrass-dominated areas therefore decreasing available habitat for potential Special Status Plant populations.

4. Soils

Without post-fire re-vegetation there is likely to be a loss of the well-rooted thatch roof, which holds the soil in place against the erosive forces of wind and water motion. Erosion is apt to diminish the soil deposits and dust catch for reduced nutrient re-supply and loss in water catch. Without post-fire seeding the land is exposed to weed infestations. Cheatgrass would invade sites, and mine and deplete the limited nitrogen sources. Holes are apt to form in the landscape from diminished vegetation cover and decreased biological production and diversity. Cumulative impacts of the No Action alternative is risk rich for weed invasion. A weedy annual cheatgrass invasion can lead to landscape scale nutrient depletion. As a flashy fuel, cheatgrass would burn more frequently causing a cumulative decline in soil nutrients and catchment functions

5. Vegetation

Some perennial native species such as bottlebrush squirreltail and Sandberg=s bluegrass would reestablish naturally, however, these and other perennial grasses and forbs were limited in much of the area prior to the burn. The plants will be in a weakened state from several years of drought followed by the burn. The area would be highly susceptible to weed invasion of cheatgrass and medusahead rye. The area would be susceptible to repeated wildfires, increasing the hazard to adjacent unburned sagebrush plant communities. The vegetation in the area after repeated burns would become dominated by annual cheatgrass, medusarye , and associated annuals.

Cumulative impacts of the no action alternative would be that fires would increase in frequency and size which would increase the amount of cheatgrass/ medusahead rye dominated area. Overall vegetation diversity would decline.

6. Watershed

The no action alternative would not achieve preburn conditions or would take many years to achieve preburn conditions without rest from livestock grazing for the Tool Box Complex Fires. Cumulative impacts would be decreased site productivity if desired vegetation is not allowed to reestablish.

7. Riparian Zones

This alternative would allow unstable upland soils to deposit in Silver Creek and reduce the chance of good perennial plant cover to establish. The riparian zone would not function properly with heavy sediment load. Cumulative impacts would be decreased proper functioning condition of Silver Creek.

8. Wildlife (includes Special Status Species)

This alternative would allow natural processes to define what recovery would occur. Grazing would continue at current levels on burnt areas. This alternative would allow increased chances for noxious weeds like medusahead rye to invade some of these areas. Invasive exotic plants like cheatgrass would also increase under this alternative. Negative impacts to special status species would occur from this alternative. Most prey species for special status raptors would likely decline if cheatgrass and medusahead rye were to become well established in the burned areas. This would also impact sage grouse, deer, elk and bighorn sheep from increases of these plants within burned areas. Once these plant species become well established within the burned areas, it is likely that they will spread to unburned areas. Negative impacts to many wildlife species would occur from this alternative.

9. Fisheries

Unconstrained overland flow without seeding will place more sediment into Silver Creek and result in siltation of spawning gravels, and potentially loss of developing fish fry. Not planting pine seedlings in the canyon will result in a time period gap of large wood replacement. Lack of wood could cause loss of pool habitat quality.

10. Livestock Grazing Management

There would be no loss of livestock AUMs because livestock use would continue as scheduled in the burned areas of the allotments.

11. Recreation

For the No Action alternative: in the vicinity of the Silver Fire, hunting opportunities would remain the same. Public land users would continue to access and use the dispersed campsites. Fishing opportunities may decrease in the both the short and long term due to increased sediment load and lack of cover. Within the vicinity of the Tool Box and the Winter Fires, the No Action would have no effect on recreational use.

12. Visual Resource Management (VRM)

Not seeding the disturbed ground in the cat lines would prolong the natural recovery of the vegetation and erosion could occur. These lines could also be used by OHVs, thus prolonging their visual impact. It would take longer to meet the VRM class II objectives of those areas viewed from US Highway 31.

C. Limited Rehabilitation Alternative

1. Cultural Resources

Under the Limited Rehabilitation alternative, cumulative impacts would be the same as the Proposed Action.

2. Noxious Weeds

Fence construction activities would have little potential of introducing new noxious weed species if equipment is inspected and cleaned as per the protocols outlined in the Proposed Action. All equipment and personnel involved in the fence construction would avoid traveling through or working in areas where medusahead is present when possible. Equipment that must travel through or work in infested areas would be cleaned on site, prior to moving to an uninfested area to continue working. Cumulative impacts from fence building activities would be areas of disturbed soil created where weed seeds transported from outside the rehabilitation area by people, animals, and natural forces could establish.

3. Special Status Plants

The repair or building of fences would have no effect on Special Status Plants. Fences would only provide protection for the recovering plant communities from grazing. The plant communities would be slower to recover in areas of intense burning as much of the seed banks may have been destroyed. Also there would be no competition for cheatgrass or other invasive weeds. Cumulative impacts would be the same as the Proposed Action or No Action alternative.

4. Soils

Impacts would be the same as the No Action alternative. Cumulative impacts would be the same as the No Action alternative. Fencing, as a regulation on grazing, may improve natural vegetation recovery with less soil decline.

5. Vegetation

Under the Limited Rehabilitation alternative, there would be little reestablishment of native species within critical areas of the fire. The critical areas in include areas of high intensity fire, areas at risk for weed invasion, and areas of moderate to high potential for water and wind erosion. These sites are susceptible to the invasion of cheatgrass and medusahead rye which establish easily after fire. Sagebrush does not

reestablish in cheatgrass-dominated areas. Cheatgrass is highly flammable and would likely reburn within the next 5 to 10 years. This short return interval of fire would result in a community dominated by annual cheatgrass, medusaheadrye, and other associated annuals. These sites would be open for invasion by noxious weeds and highly susceptible to recurring wildfire as with the no action alternative. Cumulative impacts are the same as the No Action alternative.

6. Watershed

The Limited Rehabilitation alternative would achieve pre-burn conditions, but would take longer than with the seeding as stated in the proposed action for the Tool Box Complex Fires. There would be no cumulative impacts if recovery is allowed to occur.

7. Riparian Zones

Impacts would be the same as the No Action alternative. Cumulative impacts would be the same as the No Action alternative.

8. Wildlife (includes Special Status Species)

Impacts to wildlife from the Limited Rehabilitation Alternative would be similar to those in the No Action Alternative. Without cattle grazing in disturbed areas, the rate of spread of exotic plants and noxious weeds would be slower. Impacts to deer, elk and pronghorn from the proposed fencing can be minimized by using a wildlife friendly design. Negative impacts to many wildlife species would occur from this alternative, but at a slower rate than in the No Action Alternative.

9. Fisheries

Same as the No Action Alternative.

10. Livestock Grazing Management

Same as the Proposed Action.

11. Recreation

Same as the no action alternative.

12. Visual Resource Management (VRM)

Not seeding the disturbed ground in the cat lines would prolong the natural recovery of vegetation and erosion could occur. These lines could also be used by OHVs, thus prolonging their visual impact. It would take longer to meet the VRM class II objectives of those areas viewed from US Highway 31.

VI. CONSULTATION AND COORDINATION

Kent Clark, permittee
Rob Elder, permittee
JR Simplot Trust--ZX Ranch, permittee
Martin Murphy, permittee
Fernette McDowell, permittee
Martin Pernoll, MD, permittee
Lorraine Sphar, permittee
Craig Foster, Wildlife Biologist, ODF&W
Oregon Dept. Of Transportation

VII. LIST OF PREPARERS/REVIEWERS

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Bill Cannon, Archeologist
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Bob Hopper, Supervisory Rangeland Management Specialist
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Barbara Machado, Hydrologist
Erin McConnell, Weed Specialist
Heather Partipilo, Botanist
Tom Rasmussen, Lakeview Field Office Manager
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Vern Stofleth, Wildlife Biologist and Resource Advisor
Shannon Theall, GIS Specialist
Paul Whitman, NEPA/Planning Coordinator
Desi Zamudio, Soil Scientist

APPENDIX 1 - COST/RISK ASSESSMENT

Part 1. Treatment Cost

Treatment	Cost
Revegetation (Seed tests, mixing, & application)	$ 96,300
Protection Fence Construction	$ 43,750
All Other Costs (Administrative, Clearances, Monitoring, Weeds)	$ 76,800
TOTAL	**$ 216,850**

Part 2. Probability of Rehabilitation Treatments Successfully Meeting ESR Objectives

Treatments	Units	NA	%
Revegetation (overall rating)	2500 acres		80
Broadcast Seeding (acres)	1500 acres		80
Aerial Seeding (acres)	1000 acres		80
Transplant Seedlings (acres)	850 acres		80
Protective Fence to Exclude Grazing (miles)	7.5		95
Fence Repair to Exclude Grazing (miles)	3.5		95
Soil Watershed Structures (overall rating)		X	
Retention dams/structures (number)		X	
Ripping, contour furrows, etc.		X	
Matting, watershed cover, etc.		X	
Other-Clean culverts		X	

Part 3. Risk of Resource Value Loss or Damage

1. No Action Alternative-- Treatments Not Implemented (check one)

Resource Value	NA	None	Low	Mid	High
Unacceptable Loss of Topsoil					
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			

2. Limited Rehabilitation Alternative-- Fence Only Treatment (check one)

Resource Value	NA	None	Low	Mid	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			

3. Proposed Action - Treatments Successfully Implemented (check one)

Resource Value	NA	None	Low	Mid	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			

Part 4. Cost Risk Summary

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

   Proposed Action _X_ Yes ___ No
   Rationale for answer: The proposed seeding and protection fences are needed to establish a perennial vegetation cover, to stabilize soils and avoid repeat wildfire hazards.

   No Action ___ Yes _X_ No
   Rationale for answer: Reasons are listed above and if no action is done catastrophic wildfire may destroy habitat as well as the possibility of noxious weed invasion.

   Limited Rehabilitation Alternative _X_ Yes ___ No
   Rationale for answer: Same as proposed action.

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

   Proposed Action _X_ Yes ___ No
   Rationale for answer: Costs are not high given the comparison of degraded rangeland and future wildfire.

   No Action ___ Yes _X_ No
   Rationale for answer: The future costs of wildfire, site deterioration, soil loss, liability, and habitat losses make no action unacceptable.

   Alternative(s) _X_ Yes ___ No
   Rationale for answer: Same as for proposed action.

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

   Proposed Action X , No Action ___ , or Limited Rehabilitation Alternatives
   Comments: The present costs are modest when you consider the high probability of soil loss, loss of wildlife habitat, future wildfire, and noxious weed invasion without treatment.

APPENDIX 2 - NATIVE/NON-NATIVE WORKSHEET

Proposed Native Plants in Seed Mixture

1. Are the native plants proposed for seeding adapted to the ecological sites in the burned area?
   X Yes ___ No Rationale: The native species selected have occurred on these ecological sites or are adapted to the included sites.

2. Is seed or seedlings of native plants available in sufficient quantity for the proposed project?
   X Yes ___ No Rationale: The native seed selected is available from the Boise seed warehouse and through private vendors.

3. Is the cost and/or quality of the native seed reasonable given the project size and Land Use and Rehabilitation Plan objectives and the guidance in BLM Manual 1745?
   X Yes ___ No Rationale: The cost of seed, along with drought tolerance, germination characteristics and ecological site were all considered in selection of native species.

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?
   X Yes ___ No Rationale: We expect the native species selected to survive environmental conditions if they can initially establish, however, they are likely to have less germination and establishment success than nonnative species.

5. Will the current or proposed land management (livestock, recreation use, wildlife populations, etc.) after the seeding establishment period maintain the seeded native plants in the seed mixture?
   X Yes ___ No Rationale: The area is managed under an adaptive rotational grazing which provides rest and controls timing and duration of grazing. Wildlife populations should not impact native species.

Proposed Nonnative Plants in Seed Mixture

1. Is the use of nonnative plants necessary to meet objectives, e.g., consistent with applicable land use/activity plans?
   X Yes ___ No Rationale: This is consistent with existing land use and activity plans. Hycrest crested wheatgrass and forage kochia are two species that will compete successfully with cheatgrass and noxious weeds and create a fire-resistant perennial cover.

2. Will nonnative 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?
   _X_ Yes ___ No Rationale: The site will be dominated by cheatgrass, other annuals, and possible noxious weeds if not seeded. A native/nonnative mix of perennial species will allow ecological processes to function. Additionally, it is imperative to establish a perennial vegetation cover to stabilize the site.

3. Will nonnative plants stay on the site they are seeded and not significantly displace or interbreed with native plants?
   _X_ Yes ___ No Rationale: The nonnative species selected will stay on-site and not interbreed and eventually more natives will enter the community once stabilized with a perennial community and the accelerated fire cycle is broken.

A "no" response requires additional analysis in the EA or selection of an alternate species in the seed mixture.

Proposed Seed Mixtures

Mix # 1 Non-native Plants	Native Plants
Triticale	Wyoming big sagebrush
	great basin wildrye
	bluebunch wheatgrass
	bottlebrush squirreltail
	Idaho fescue
	sand dropseed
	Sandberg=s bluegrass
	alfalfa
	Lewis flax

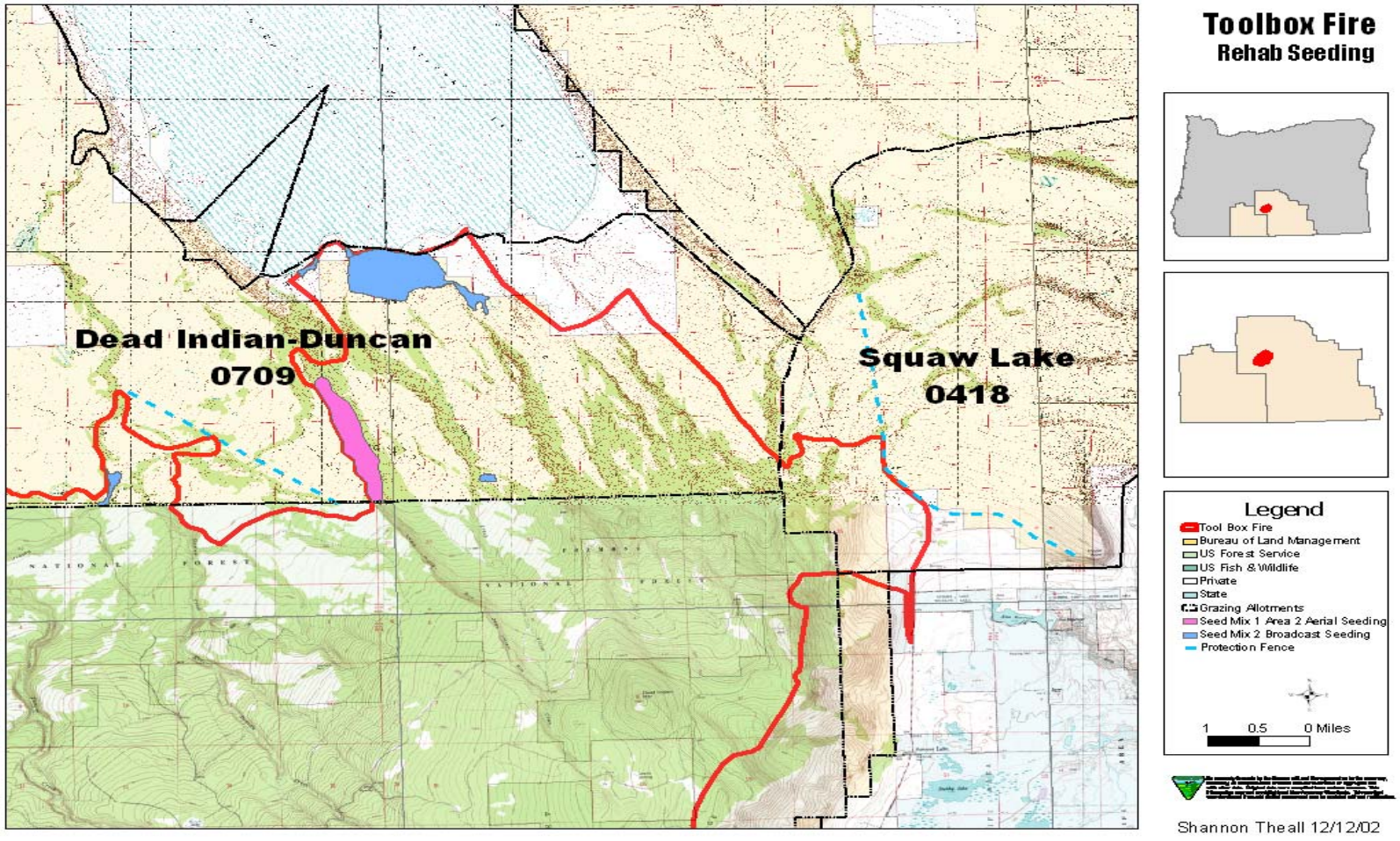
Mix # 2 Non-native Plants	Native Plants
crested wheatgrass	great basin wildrye
forage kochia	sand dropseed
triticale	alfalfa

APPENDIX 3 - ESR PROJECT SUMMARY

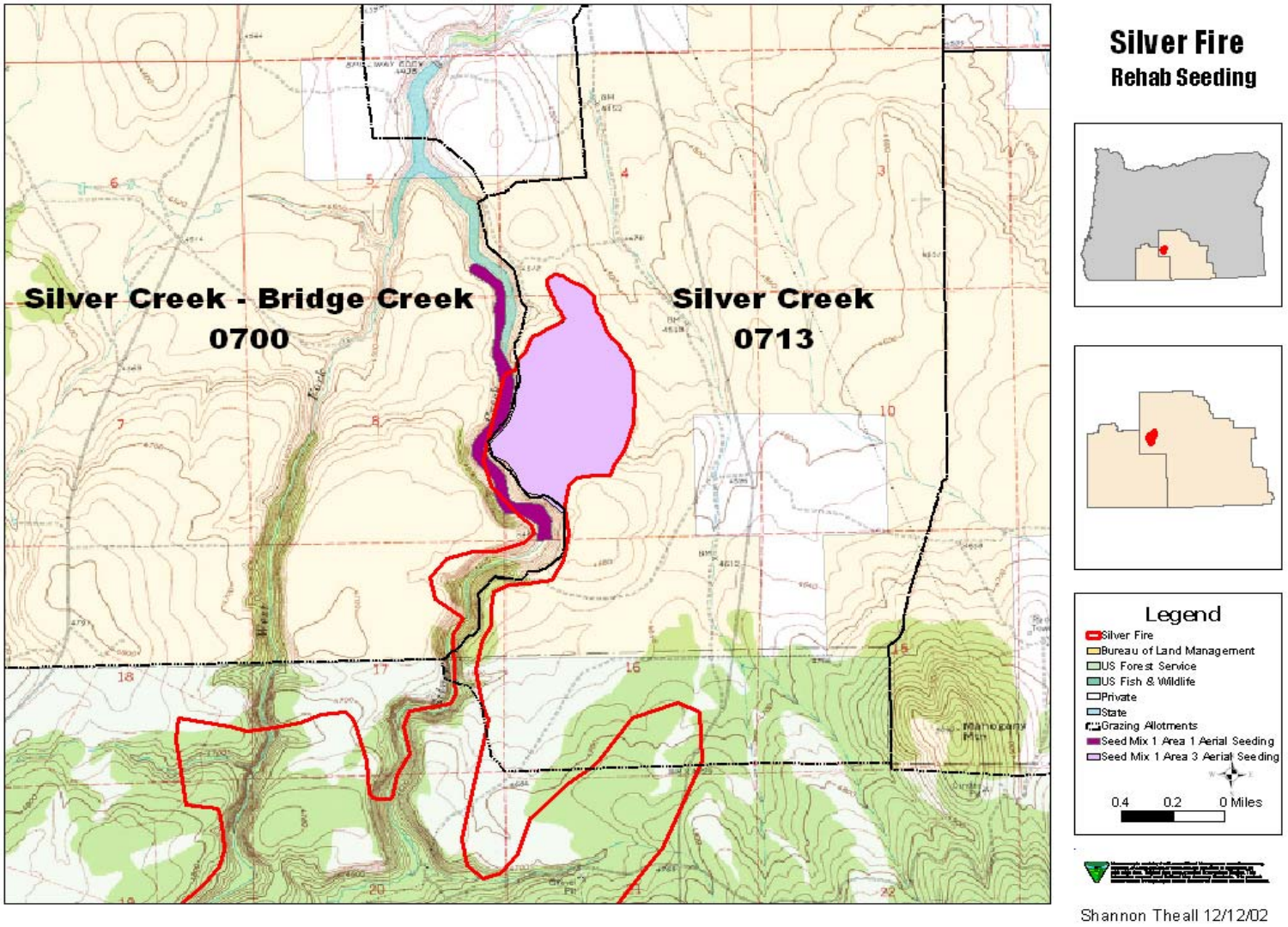
Fire Name: Tool Box Complex Fires	Tool Box Fire	Silver Fire	Winter Fire
Fire Number:	M-262	M-262	M-262
Fire Control Date:	10/01/02	10/01/02	9/15/02
Acres BLM Burned:	7,700	315	882
Start of Rehabilitation Project (Mo/Yr):	11/2002	12/2002	12/2002
Completion of Rehabilitation Project (Mo/Yr):	08/2003	01/2003	01/2003
Miles of Temporary Fence:	0	0	0
Miles of Permanent Fence:	7.5	0	0
No. of Soil/Watershed Structures:	none	none	none
Acres Seedling Planting:	600	250	none
Acres of Revegetation:	1,650	290	360
Acres of Burned Area Protected for Natural Regeneration:	6,050	25	522
Total Acres Rehabilitated:	7,700	315	882

APPENDIX 4 – PROJECT MAPS

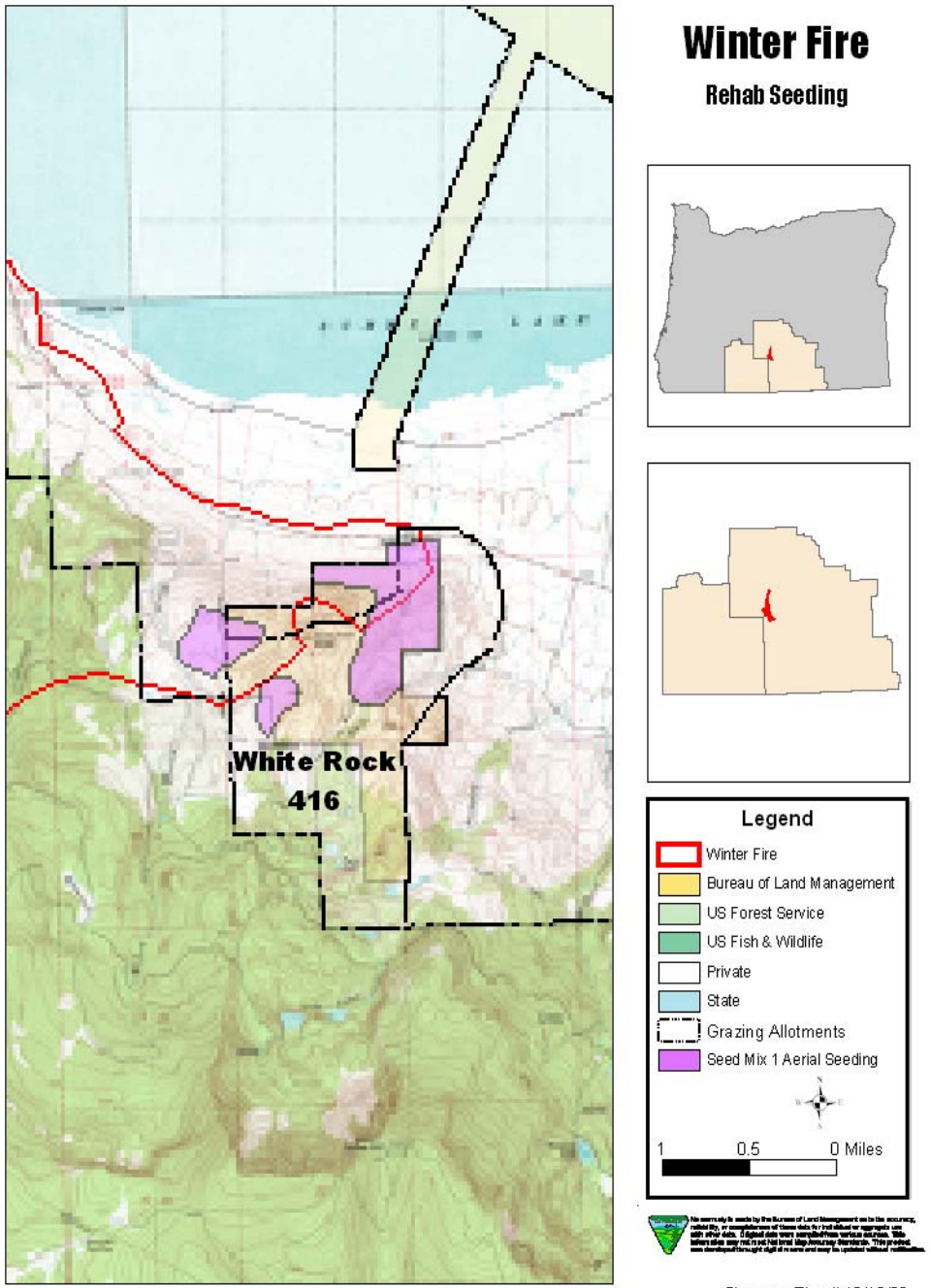
Map 1: Toolbox Fire Rehab Seeding (toolbox_ea.bmp)
Map 2: Silver Fire Rehab Seeding (silver_ea.bmp)
Map 3: Winter Fire Rehab Seeding (winter_ea.bmp)
Map 4: Toolbox Fire Seedling Planting (toolbox_ea2.bmp)
Map 5: Silver Fire Seedling Plantings (silver_ea2.bmp)
Map 6: Grazing Allotments and Juniper Treatment Area 1 (toobox_ea3.bmp)
Map 7: Grazing Allotments and Juniper Treatment Area 2 (silver_ea3.bmp)


Toolbox Fire
Rehab Seeding
Dead Indian-Duncan
0709
Squaw Lake
0418
Legend
Tool Box Fire
Bureau of Land Management
US Forest Service
US Fish &Wildlife
Private
State
Grazing Allotments
Seed Mix 1 Area 2 Aerial Seeding
Seed Mix 2 Broadcast Seeding
Protection Fence
1 0.5 0 Miles
Shannon Theall 12/12/02

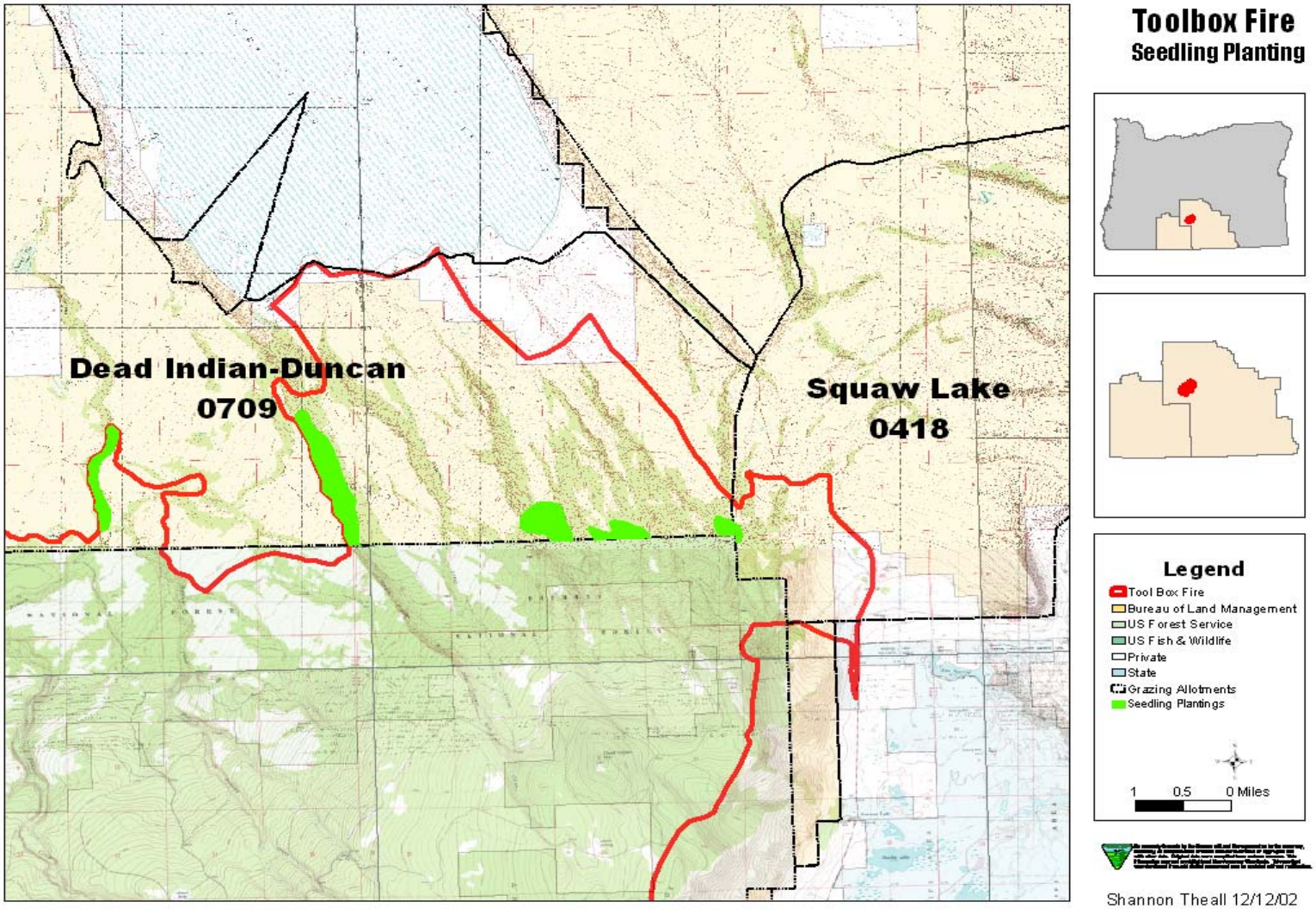
Map 1


Silver Creek - Bridge Creek
0700
Silver Creek
0713
Silver Fire
Rehab Seeding
Legend
Silver Fire
Bureau of Land Management
US Forest Service
US Fish & Wildlife
Private
State
Grazing Allotments
Seed Mix 1 Area 1 Aerial Seeding
Seed Mix 1 Area 3 Aerial Seeding
0.4 0.2 0 Miles
Shannon Theall 12/12/02

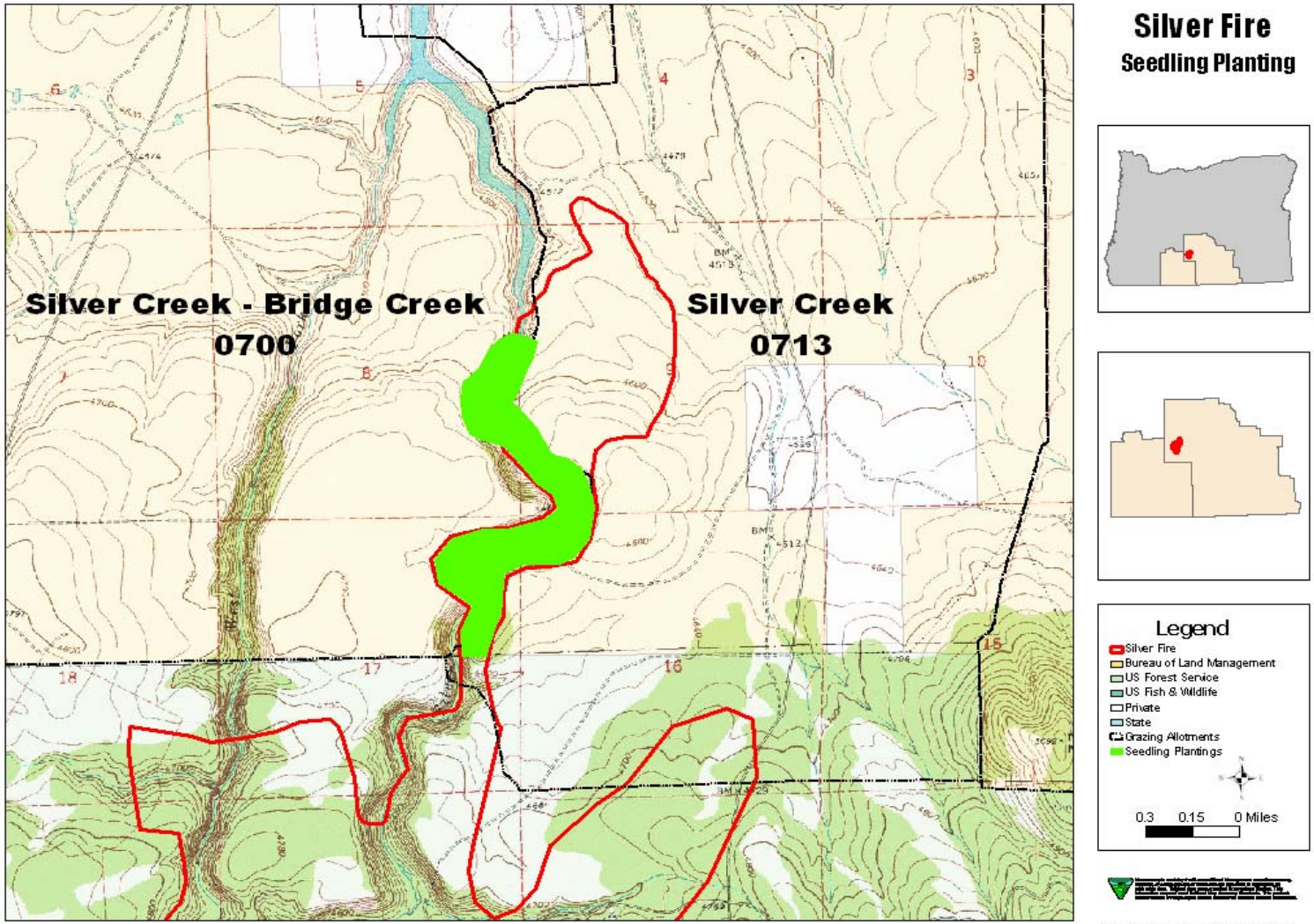
Map 2


Winter Fire
Rehab Seeding
White Rock
416
Legend
Winter Fire
Bureau of Land Management
US Forest Service
US Fish & Wildlife
Private
State
Grazing Allotments
Seed Mix 1 Aerial Seeding
1
0.5
0 Miles
Shannon Theall 12/12/02

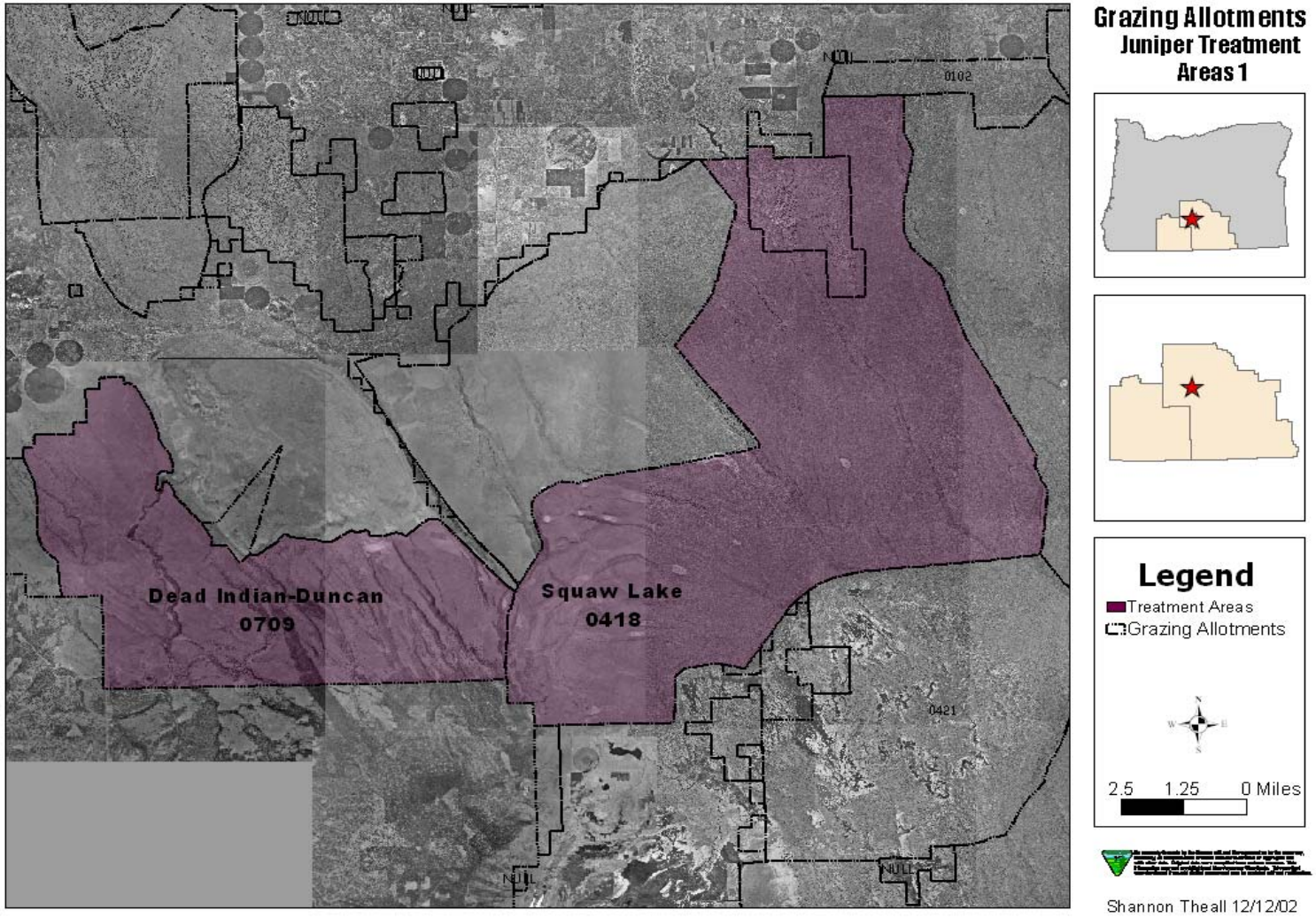
Map 3


Toolbox Fire
Seedling Planting
Dead Indian-Duncan
0709
Squaw Lake
0418
Legend
Tool Box Fire
Bureau of Land Management
US Forest Service
US Fish & Wildlife
Private
State
Grazing Allotments
Seedling Plantings
1 0.5 0 Miles
Shannon Theall 12/12/02

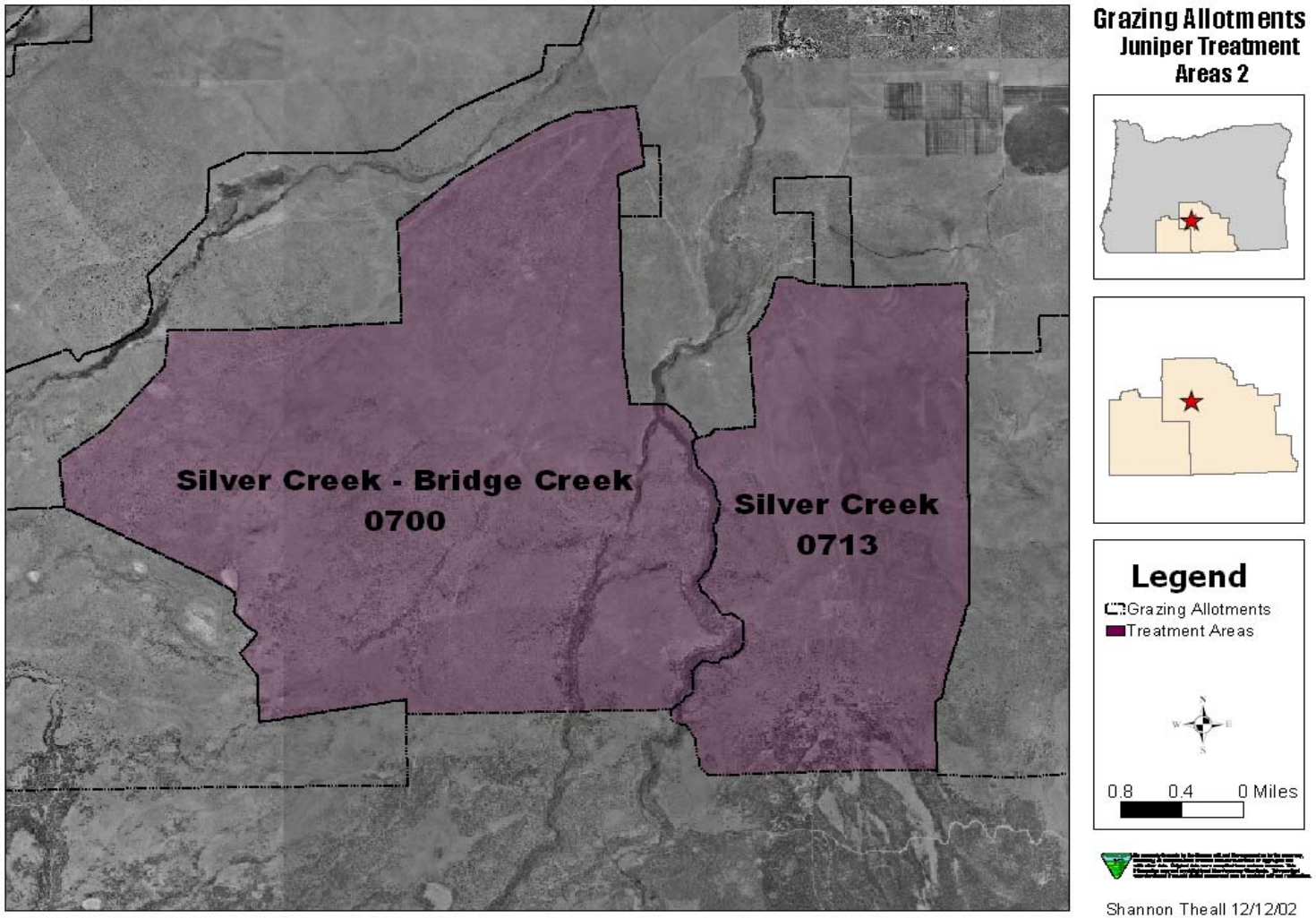
Map 4


Silver Creek - Bridge Creek
0700
Silver Creek
0713
Silver Fire
Seedling Planting
Legend
Silver Fire
Bureau of Land Management
US Forest Service
US Fish & Wildlife
Private
State
Grazing Allotments
Seedling Plantings
0.3 0.15 0 Miles
Shannon Theall 12/12/02

Map 5


Grazing Allotments
Juniper Treatment
Areas 1
Dead Indian-Duncan
0709
Squaw Lake
0418
0102
0421
NULL
NULL
Legend
Treatment Areas
Grazing Allotments
2.5 1.25 0 Miles
Shannon Theall 12/12/02

Map 6


Grazing Allotments
Juniper Treatment
Areas 2
Silver Creek - Bridge Creek
0700
Silver Creek
0713
Legend
Grazing Allotments
Treatment Areas
0.8 0.4 0 Miles
Shannon Theall 12/12/02

Map 7