

AMENDED
BEATYS BUTTE FIRE
EMERGENCY FIRE REHABILITATION PLAN
AND
ENVIRONMENTAL ASSESSMENT
OR-026-00-35

Bureau of Land Management
Burns District Office
HC 74-12533 Hwy 20 West
Hines, OR 97738

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Amended
Beatys Butte Fire
Emergency Fire Rehabilitation Plan
and
Environmental Assessment
OR-026-00-35

On July 12, 2000, the Beatys Butte Fire (M-102) ignited by lightning and burned approximately 35,155 acres of public and private lands within the Lakeview and Burns Districts. The fire started on the west slope of Beatys Butte and burned in a northeasterly direction across Beatys Butte. Once on the east side of the butte, it was wind driven across the Catlow Desert. By the time the fire was controlled on July 16, 2000, it had scorched 20 miles of the Harney County landscape.

I. PURPOSE AND NEED

The Beatys Butte Fire burned 15,158 acres of public land and 8,453 acres of private land within the Beatys Butte Allotment (#0600) within the Lakeview District; 4,817 acres of public land and 3,940 acres of private land within the South Steens Allotment (#06002), 1,978 acres of public land within the Blitzen Allotment (#06009), and 805 acres of public land and 5 acres of private land within the North Catlow Allotment (#06001) all of which are within the Burns District.

The fire burned within several ecological sites on and around Beatys Butte which, for the most part, will recover with natural revegetation if rest from grazing is provided. Approximately 25 miles of intermittent drainages on Beatys Butte burned extremely hot and will require some seeding to augment recovery.

Approximately 2,726 acres of public land within the Lakeview District and 7,600 acres of public and 3,945 acres of private land within the Burns District are the same landform and ecological site (semidesert sandy loam).

This landform, at the time of the fire, supported a low seral plant community of Wyoming big sagebrush, green rabbitbrush, bottlebrush squirreltail, cheatgrass, mustards, and other annuals. On portions of this landscape where fires have been more recent, the plant community was comprised of green rabbitbrush, scattered bottlebrush squirreltail, cheatgrass, mustards, and other annuals.

The annual precipitation in this area is less than 10 inches. The soil is moderately deep to deep, with a surface texture of sand to sandy loam which is prone to wind erosion. These factors create a harsh environment for plant germination and establishment which requires reseeding with a mixture of naturalized species adapted to the site as well as native species to provide a perennial plant cover for stabilization of the site. Establishment of a perennial plant community will reduce the high frequency of wildfires.

In recent years, wildfires have occurred both north and south of this fire. Where the Bureau of Land Management (BLM) did not rehabilitate the fires, the sites are scattered rabbitbrush, cheatgrass, mustards, and other annuals resulting in a fire frequency of 3 to 5 years between fires. The Catlow Fire, which BLM seeded in the fall of 1998, held the Beatys Butte Fire on its boundaries at least partially due to the establishment of more fire-resistant perennial species. Once a perennial plant community is established, the frequency of wildfire occurrence will be reduced, allowing plant community development eventually (30 years +) to a native Wyoming big sagebrush/bunchgrass community.

The burned area in the Beatys Butte, the North Catlow, and South Steens Allotments will require reconstruction of 3 miles of District boundary fence to provide protection from grazing animals. The Blitzen and South Steens Allotments will require 3 miles of reconstruction of allotment boundary fence to provide protection. In addition, the South Steens Allotment will require construction of approximately 6 miles of protection fence to provide adequate rest from livestock grazing. The BLM had issued an Emergency Fire Rehabilitation Plan and Environmental Assessment (EA) in September. This plan is amended through this document. The amended plan eliminates rehabilitation of acreages of private land larger than 40 acres where approximate equal value goods and services are not provided by the landowner.

II. RELATIONSHIP TO PLANNING

The Andrews Management Framework Plan (MFP) completed in 1982 is the current land use plan for the area. Within the Burns District, the South Steens Allotment Management Plan (AMP) and EA (June 1995) is the site-specific management plan for that portion of the area within the South Steens Allotment. The area in the Lakeview District is included in the Warner Lakes MFP (1983). The Beatys Butte AMP/Environmental Impact Statement (EIS) is the site-specific management plan for that portion of the area within the Lakeview District.

III. DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

The Beatys Butte Fire burned 15,158 acres of public land and 8,453 acres of private land within the Lakeview District. It also burned 7,600 acres of public land and 3,945 acres of private land within the Burns District.

A total of 9,686 acres of public land and 3,945 acres of private land would be seeded with a rangeland drill (see attached map) using a seed mixture of 8 pounds of hycrest crested wheatgrass, 1-pound western wheatgrass, 1-pound forage kochia, .25-pound of bottlebrush squirreltail, .25-pound of Lewis flax, and .25-pound of Wyoming big sagebrush. The forage kochia and Wyoming big sagebrush seed would be aerial broadcast by fixed-wing aircraft, following rangeland drilling to help assure establishment of these species. On approximately 640 acres of public land within the Burns District, Siberian wheat variety (vavilov) would be substituted for hycrest crested wheatgrass in the seed mix for a comparison of establishment success.

The proposed action for the Beatys Butte Fire (M-102) (see attached map) is to drill seed with a rangeland drill approximately 7,600 acres of public land and 3,945 acres of checker-boarded private land within the Burns District. Within the Lakeview District it is proposed to drill seed approximately 2,726 acres of public land. This area is one dominant ecological site which is semidesert sandy loam 8 to 10 inches. The site has annual precipitation of 10 inches or less, it is highly susceptible to wind erosion and will revegetate with cheatgrass and other exotic annuals if not seeded. Naturalized species, such as hycrest crested wheatgrass, would dominate the mix because of cheatgrass competition, low annual precipitation levels, and the need to establish a perennial vegetation cover to stabilize the site.

The proposed seed mix is adapted to the site potential with native species being incorporated where feasible.

In the Burns District, checker-boarded private land 40 acres or more in size and when the owners are not cooperators would be delineated by Global Positioning System (GPS) and not rehabilitated. The cooperating landowners would be assessed the percentage of total costs (by direct funding or in-kind services or a combination of both) based on the amount of their private land treated. Parcels 40 acres and below would be treated with public land (with permission of landowners) due to the difficulties and expense of separating out small parcels. Of the 3,945 acres of private land proposed for seeding within the Burns District, Roaring Springs Ranch, Inc., owns 3,562 acres.

Roaring Springs Ranch, Inc., would provide the tractors and operators and complete the rangeland drilling for the 7,600 acres of public land and the 3,945 acres of private land within the Burns District. The BLM would provide the rangeland drills and the seed to be drilled on public and private lands. The BLM would also provide the seed mix and aerial seed all public land and 640 acres of Roaring Springs Ranch, Inc., private land. This would be an equal value exchange of goods and services. In the Lakeview District, public land only would be seeded.

On the Beatys Butte portion of the fire within the Lakeview District, 25 miles of intermittent drainages, burned extremely hot sterilizing portions of these sites which will inhibit natural revegetation. Aerial seeding by a helicopter would be used on these drainages. It is estimated that 450 acres of intermixed public and private lands would require aerial seeding using a seed mixture of 5 pounds of Great Basin wildrye (trailhead variety) and 14 pounds of tritcale hybrid wheat per acre (see attached map for drainage locations).

To capture sediment in the drainages and reduce erosion prior to plant establishment, 32 straw bale check dams are needed in three separate reaches of West Road and East Road Gulches (see attached map). These structures would be constructed from certified weed-free straw bales anchored with rebar and smooth wire.

The burned area would require construction of 6 miles of 3-strand barbed wire fence (wire spacing bottom 18 inches, middle 30 inches, top 42 inches, bottom strand smooth), as well as reconstruction of 3 miles of 4-strand District boundary fence and 3 miles of 4-strand allotment boundary fence. This would provide protection during germination and establishment and allow continued management following the rest cycle (see attached map for fence locations). The new protection fence would be retained as a pasture fence following the two growing seasons of protection from grazing.

Four spring exclosures (Mustang Spring, East Road Spring, East Road Gulch Spring, and Buena Vista Spring (see map for locations) burned in the fire need to be reconstructed. This would require about 0.75-mile of 4-strand barbed wire fence with material for 16 corners and 4 gates.

Table 1: Summarized seeding cost by species

Species	Bulk Pounds Per Acre	Total Pounds	Approximate Cost Per Pound	Approximate Cost Per Acre
<i>Aerial Seeding (shrub mix)</i> (17,382 acres)				
Forage kochia (immigrant)	1	10,966	20.00	20.00
Wyoming big sagebrush	.50	2,750	15.00	7.50
Seed treatment and mixing			.30	.37
Aerial application				5.00
Total	1.50	13,716		29.12

Species	Bulk Pounds Per Acre	Total Pounds	Approximate Cost Per Pound	Approximate Cost Per Acre
Aerial Seeding (grass mix) (450 acres)				
Triticale	14	6,300	.20	2.80
Basin wildrye (trailhead)	5	2,250	11.00	55.00
Seed treatment and mixing			.30	5.70
Aerial application				8.00
Total	19	8,500		71.50
Rangeland Drill Seeding (14,271)				
Hycrest crested wheatgrass (13,631 acres)	10	133,088	1.75	17.50
Siberian wheatgrass (640 acres)	8	5,120	2.50	20.00
Western wheatgrass (arriba)	1	14,271	5.00	5.00
Bottlebrush squirreltail	.25	3,570	20.00	5.00
Lewis flax (appar)	.25	3,570	4.00	1.00
Drilling cost				12.00
Total	9.5			41.00**

* All costs and weights are estimates

** Average per acre cost

A. Alternatives

1. No Action Alternative

No public and private lands would be seeded. The burned areas are in a low seral state and lack perennial species. Vegetation reestablishment without seeding would be green rabbitbrush, cheatgrass, mustards, and associated annuals. These sites would be open to invasion by noxious weeds and recurring wildfires. There would be no protective fence constructed and no reconstruction of allotment or District boundary fences, allowing livestock and wild horses to graze the area during the germination and establishment period.

- a. The landform to be rehabilitated is a semidesert, sandy loam ecological site with less than 10 inches of annual precipitation. This site is highly susceptible to wind erosion, so establishment of the perennial vegetation cover is critical.
- b. Seeded species will have competition from cheatgrass and annual mustard with possible noxious weed invasion.
- c. The Raz-Lewis wildfire rehabilitation (M-572) completed in 1998 by the Burns District was seeded with all native species for the ecological site (semidesert loam). During the same year, Catlow fire rehabilitation (M-590) was also completed on a semidesert sandy loam ecological site with a mixture of native and naturalized species such as hycrest crested wheatgrass. The semidesert loam ecological site does not have the coarse soil surface texture and is a more productive site which is less prone to wind erosion and more conducive to germination and seedling establishment.

To this point in time, the Raz-Lewis native rehabilitation has resulted in cheatgrass establishment with less than 1 percent of the plant composition being seeded native species. The Catlow fire rehabilitation, which is the same ecological site that is proposed in this rehabilitation plan, has 61 percent of the composition naturalized species, mostly hycrest crested wheatgrass established.

In summary, when all of the factors listed above are considered, a mixture of naturalized species and native species adapted to the site would provide the best possibility for success in establishing a perennial plant cover which would stabilize the site. When a perennial plant community is established, seral succession toward a native Wyoming big sagebrush bunchgrass plant community would begin. This process may involve 30+ years. The alternative would be a cheatgrass community with the associated wildfire cycle and accelerated erosion.

IV. AFFECTED ENVIRONMENT

A. Topography and Climate

The elevation on the Beatys Butte Fire ranges from 7,900 feet in the southwest portion of the burn to 4,500 feet in the east. The slope within the burned area varies from 0 to 25 percent. The area proposed for seeding receives less than 10 inches of precipitation, with most of the precipitation occurring in the winter in the form of snow.

B. Soils

The soils are alluvial sands to sandy loams in texture, deep to moderately deep with limited soil horizon development. Within the western portion of the burn closest to Beatys Butte, there is an increase in coarse fragments throughout the soil profile on this landscape. The erosion hazard from wind is moderate due to soil surface texture.

C. Vegetation

The major vegetation type burned on the landform requiring rehabilitation is:

Wyoming big sagebrush/annuals

This ecological site was originally a Wyoming big sagebrush/bunchgrass site that is now in a lower seral stage. Cheatgrass has filled the niche of perennial bunchgrasses and forbs such as needleandthread grass, bottlebrush squirreltail, Indian ricegrass, and globe mallow.

D. Watershed

The burn site, although in a low seral state, was stable without accelerated erosion. The deeper rooting systems of Wyoming big sagebrush have been removed by the fire. The association of annuals, which will occupy the site, would not provide sufficient vegetation cover or root mass to maintain stable soil conditions. Accelerated erosion and deteriorated watershed condition would be expected on this site. The size of this burn and location on the landscape would have an impact on the entire watershed. The wind erosion which may result from shifting sands could impact adjacent agricultural land in the eastern boundary, if a perennial cover is not established.

The native plant diversity of herbaceous species expected on this portion of the Catlow Desert was nonexistent before the fire with much of the perennial bunchgrass niche being occupied by cheatgrass and other annuals.

E. Wildlife

The burned area is year-round habitat for a large population of antelope. Perennial grasses, forbs, and shrubs are important for survival of these animals during spring and winter. Much of the area is habitat for chukars and doves as well as many small mammals and songbirds. The site is marginal winter habitat for sage grouse due to location on the landscape and rangeland condition before the burn.

Raptors using the area include golden eagles, prairie falcons, ferruginous hawk (BLM sensitive species), and Swainson's hawk (BLM sensitive species).

Bald eagle (Threatened species) and American peregrine falcon (Endangered species) are migrants that would rarely be seen in this area.

F. Livestock Grazing Management

In the Burns District, the fire burned 4,817 acres of public land and 3,940 acres of private land within the South Steens Allotment. This allotment contains 228,428 acres of public land and 103,972 acres of private land. The grazing permit for this allotment is for 21,197 AUMS licensed at 60 percent Federal land because of the large amount of private land intermixed with public land. The grazing permit is issued to Roaring Springs Ranch, Inc., owning most of the private land within the allotment. Roaring Springs Ranch, Inc., owns 3,562 acres of the total 3,945 acres of private land within the burn in the Burns District.

This fire also burned 1,978 public land acres within the Blitzen Allotment. This allotment is unallocated and contains 6,110 acres of public land and 965 acres of private land for a total of 7,075 acres. The remainder of the burn within the Burns District, 805 acres of public land and 5 acres of private land was within the North Catlow Allotment. The total loss of forage on public land within the Burns District would be approximately 190 AUMs with a loss of approximately 98 AUMs on private land.

Within the Lakeview District, 15,158 acres of public land and 8,453 acres of private land burned all of which is within the Beatys Butte Allotment. The MC Grazing Association controls the grazing permit for this allotment which consists of 25,549 AUMs of specified grazing use.

The portion of Beatys Butte Allotment that burned was scheduled for rest from grazing in 2001 and in 2002 there is adequate grazing in the south side of the allotment which is fenced out of the burned areas. Therefore, there is no direct loss of AUMs for permitted livestock grazing on the Beatys Butte Allotment.

Public land within four grazing allotments was burned by the fire. Allotments, active AUMs, total public acres within each allotment, public and private acres burned within each allotment are listed below:

<u>Allotment</u>	<u>Active AUMs</u>	<u>Total Public Acres</u>	<u>Public Acres Burned</u>	<u>Private Acres Burned</u>
South Steens	21,197	228,428	4,817	3,940
Blitzen	492	8,280	1,978	0
North Catlow	3,704	170,809	805	5
Beatys Butte	25,549	506,985	15,158	8,453

G. Wilderness

There are no wilderness or Wilderness Study Areas (WSAs) within this emergency rehabilitation area.

H. Recreation and Visual Resources

The Catlow Desert and east of Beatys Butte Road receives very little recreation use. This portion of the desert is checker-boarded private and public lands with restricted access. Fall antelope hunting is the major use in this area. Access is limited in the spring due to trail conditions and irrigation on private land to the north and east.

This land is in a Visual Resource Management (VRM) Class IV area allowing management activities which require major modification of the existing character of the 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 viewer attention; however, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating the basic elements.

The landscape is flat with a grey/green overcast color mixed with brown interspaces and granular surface texture.

I. Cultural Resources

The treatment area has potential to contain significant archaeological sites and will be inventoried prior to implementation of any surface-disturbing activities. No paleontological or American Indian religious or traditional use sites are known to occur within the treatment area.

J. Wild Horses

The burned area within the Lakeview District is within the Beatys Butte Herd Management Area (HMA). The appropriate management level is 100 to 250 animals. The current population is estimated to be 234 animals.

K. Other Critical Elements

None.

L. Special Management Areas

The proposed rehabilitation area in the Beatys Butte burn is within the extreme west boundary of the Catlow tui chub and Catlow Valley redband trout agreement area. The BLM, USFWS, Oregon Department of Fish and Wildlife (ODFW), Malheur National Wildlife Refuge, and Roaring Springs Ranch, Inc., are managing these areas to improve habitat for these fish species. However, the burn on this site would have no direct impact on these species because there are no perennial waters and, therefore, no fishery.

V. ENVIRONMENTAL CONSEQUENCES

A. Proposed Action

1. Soils

The soils east of Beatys Butte Road within the burn area are prone to wind erosion and accelerated moderate erosion may result if a perennial plant cover is not established. There is potential for producing a more diverse, perennial vegetative community as a result of seeding this area. Any portions of this landscape not seeded would revert to green rabbitbrush, cheatgrass, and associated annuals with a high susceptibility to repeat wildfires.

The proposed seeding would establish a perennial vegetation cover with a developed rooting system of fibrous and tap roots to hold the soil in place and protect the soil from potential erosion hazards. Construction of protection fence and reconstruction of fences would provide protection from grazing animals to provide for germination and establishment of a perennial plant cover.

2. Vegetation

Seeding would establish a perennial vegetation cover with varied species of grasses, forbs, and shrubs providing structural diversity. Cheatgrass, other annuals, and possibly noxious weeds would compete strongly during the first 3 years following seeding. The plant species mix, with species such as hycrest crested wheatgrass and forage kochia, were selected for drought tolerance, adaptation to the site, and germination characteristics with the potential to outcompete cheatgrass, other introduced annuals, and noxious weeds.

Although the seeded mix is predominantly naturalized species, it would provide a perennial vegetative cover for soil protection, varied structure and palatable species for wildlife and livestock and fire-resistant species to lessen the influence of wildfires on this landscape.

By establishing a perennial plant cover which would break the cheatgrass fire cycle, this site would be allowed to develop toward a native Wyoming big sagebrush/bunchgrass community.

Equipment used for seeding such as rangeland drills, tractors, and vehicles to transport seed, would be based at BLM, Burns or Roaring Springs Ranch, Inc. To discourage introduction of noxious weed seed to the rehabilitation areas, this equipment would be cleaned of vegetative material (seed, debris, etc.) before working on-site.

The construction of protection fence and reconstruction of fences would provide protection from grazing animals to provide for germination and establishment of a perennial plant cover.

3. Watershed

The mix of species proposed for seeding would provide for the capture and release of precipitation and snowmelt preventing erosion. These perennial species would provide developed rooting systems with fibrous and tap roots and community structure lacking in a cheatgrass community. Once perennial species are established, overall watershed health would be improved, with on-site improvement as the burned area develops toward a native Wyoming big sagebrush/bunchgrass community. As stated above, construction of protective fence and reconstruction of existing fences would provide protection from grazing animals to provide for germination and establishment of a perennial plant cover.

The construction of straw check dams in the gulches would reduce the risk of severe erosion and with the capture of material behind the check dams could fill in the gulches and raise the water table. The establishment of annual triticale would reduce the risk of erosion in the short term and the Great Basin wildrye would help to protect the soil in the long term.

4. Livestock Grazing Management

The burned areas on public land would be rested for a minimum of two growing seasons to allow for plant germination and species establishment. Some high intensity, short duration early season grazing (2-3 weeks) may be allowed to lessen cheatgrass competition and allow release of perennial species. Following the rest period for germination and establishment, the livestock management existing preburn would be continued. The South Steens Allotment protective fence would be retained and the area north of the fence would be an additional pasture fence to be managed under adaptive rotational grazing.

5. Wilderness

There would be no impact to wilderness resources from the proposed action.

6. Recreation and Visual Resources

Recreation opportunities would be improved by reducing the fire hazard and improving the wildlife habitat. Gates at each jeep trail along the new fence would maintain recreation access. Also, the fence design would allow for easy crossing by humans. Restoring a more diverse plant community and lessening the impacts of the annual cheatgrass would help restore the natural vegetation forms, colors, and textures. The proposed protection fence would introduce short, green vertical lines into the landscape and would be visible to the recreationists near the fence.

7. Wildlife

The seeded area would provide cover and structure lacking in the cheatgrass annual dominated communities. However, shrubs (other than green rabbitbrush) would take several years to provide structure needed by some species. The perennial species seeded would provide a more stable forage and habitat for most species. There would be no impacts on bald eagle and American peregrine falcon.

The proposed fence would impede movement by antelope although animals would be able to move through the fence. The impacts of the fence on antelope would be mitigated by wire spacing allowing a 16-inch space from ground to bottom wire and assuring the bottom strand is smooth.

8. Cultural Resources

In order to mitigate potential negative impacts caused by rangeland seeding operations, significant cultural properties would be avoided. No negative impacts to significant cultural resources would be allowed.

9. Fisheries

No direct impacts to fisheries would result from the proposed action.

10. Wild Horses

These animals would graze on the burned areas within the HMA. There is adequate forage in the HMA to support the current population and the increases in population expected during the vegetation establishment period (two growing seasons). The reconstruction of the District boundary fence would restrict these animals within the HMA.

B. No Action Alternative

1. Soils

Under natural revegetation, cheatgrass and other annuals would reestablish with few to no perennial species. The root systems of these annual species are not sufficient to hold the soil in place which would increase the probability of accelerated soil erosion. The increased frequency of fires due to cheatgrass would increase the possibilities of future accelerated erosion on the site. Without the check dam structures being constructed in the gulches, accelerated erosion would be expected.

2. Vegetation

The burned area described for treatment would revert to green rabbitbrush, cheatgrass, mustards, and other exotic annuals with much of these sites available for noxious weed invasion.

Some perennial native species such as bottlebrush squirreltail and green rabbitbrush would reestablish; however, perennial grasses and forbs were less than 1-percent of the vegetation composition prior to the burn. The area would be susceptible to repeat wildfires and a high probability for future catastrophic wildfire. With no construction or reconstruction of protective fences those perennial grasses and forbs which might reestablish would be hindered by free-roaming livestock and wild horses.

3. Watershed

As described in the vegetation and soils section, the burned area would revegetate to green rabbitbrush, cheatgrass, mustards, other exotic annuals, and the site would be susceptible to noxious weed invasion. These species provide poor vegetation cover and root structure providing little surface protection and soil holding capacity. These conditions would result in a deteriorated portion of this watershed with possible erosion deposition on adjoining private agricultural land.

These areas would be vulnerable to repeat wildfires which would result in further deterioration of the watershed.

East Road and West Road Gulches would be vulnerable to severe erosion in the short term and the channels would continue to erode over time without the establishment of productive perennial grasses like Great Basin wildrye.

4. Livestock Grazing Management

Although standard policy for burn recovery and vegetation reestablishment on burned areas is two growing seasons of rest, an exception might be requested due to site conditions. Depending on first year growing conditions, high intensity short duration grazing may be requested to reduce cheatgrass competition and allow the few native plants to cycle. If grazing is timed properly, cattle could lessen the cheatgrass competition and lessen the fire hazard on the burned area. There would be no control of livestock grazing in the area without reconstruction of fences and construction of a protection fence.

5. Wilderness

There would be no impact to wilderness resources from the no action alternative.

6. Recreation and Visual Resources

Recreation opportunities could be impacted by increased fire frequency and reduced vegetation diversity resulting in less available wildlife habitat and less desirable area for hiking and camping. Wildfire hazards would increase as more of the landscape is dominated by cheatgrass and other annuals of high fire susceptibility. Establishment of annual vegetation would result in uniform vegetation forms, colors, and textures.

7. Wildlife

Wildlife species, dependent on plant communities with species and structural diversity, would not use the cheatgrass habitat. There is also a lack of palatable spring forbs and little winter forage for antelope. Repeat wildfires impact wildlife species because this impedes shrub establishment (cover) in the burned areas, with the exception of some root sprouting species such as rabbitbrush.

8. Cultural Resources

Due to the nature of the sediments in the fire area, the no action alternative would be much less desirable than the proposed action because accelerated wind erosion may occur.

9. Fisheries

There is no direct impact on fisheries from this burned area seeing no perennial water is on-site.

10. Wild Horses

If District boundary fences were not reconstructed these free-roaming animals would travel outside the HMA. This may cause negative impacts to vegetation on public and private lands outside of the herd area.

C. Alternative 2

Seeding with the Construction of a Temporary Protection Fence On-site

1. Soils

Same as described under the proposed action.

2. Vegetation

Same as described under the proposed action.

3. Watershed

Same as described under the proposed action.

4. Livestock Grazing Management

The management would be as described under the proposed action except without a pasture fence which would serve as a protection fence on the South Steens portion of the burn. The BLM would pay for removal of this fence when it was determined to no longer be needed for management of the seeding. The direct costs to the government would be increased due to the additional miles of fence and removal when objectives are met. This fence would not assist in accomplishing long-term management objectives. There would be another approximately \$10,000 if removal were necessary.

5. Wilderness

There would be no impact to wilderness from Alternative 2.

6. Recreation and Visual Resources

Impacts to recreation and visual resources from Alternative 2 would be similar to those described for the proposed action.

7. Wildlife

Same as proposed action as far as impacts from vegetation composition. The fencing proposal would have more impacts on antelope than the cross-fencing in the proposed action due to the additional miles of fence.

8. Cultural Resources

Similar to the proposed action with the exception of the proposed fencing. The proposed fencing would not be entirely inventoried because fence construction is a low impact activity. Fence inventory would occur where post fencing livestock congregation and significant trailing is anticipated.

9. Fisheries

There is no direct impact on fisheries from this burned area seeing there are no perennial water sources on-site.

10. Wild Horses

Same as described under the proposed action.

VI. CONSULTATION AND COORDINATION

Oregon Department of Fish and Wildlife
Roaring Springs Ranch, Inc.

VII. ANNUAL WORK PLAN SUMMARY

BEATYS BUTTE FIRE EMERGENCY REHABILITATION PLAN (M-102)

Item	Cost/Unit	Units	Total	Funding Year Needed
Seeding (rangeland drill)				
Hycrest crested wheatgrass	\$ 1.75/lb x 10 lbs/ac	13,631 ac	\$ 240,000	2001
Siberian wheatgrass (vavilov)	\$ 2.50/lb x 8 lbs/ac	640 ac	\$ 13,000	2001
Western wheatgrass (arriba)	\$ 5.00/lb x 1 lb/ac	14,271 ac	\$ 72,000	2001
Bottlebrush squirreltail	\$ 20.00/lb x .25 lb/ac	14,271 ac	\$ 72,000	2001
Lewis flax (appar)	\$ 4.00/lb x .25 lb/ac	14,271 ac	\$ 15,000	2001
Seed drilling contract	\$ 12.00/ac	2,700 ac	\$ 33,000	2001
(Lakeview District)				
SUBTOTAL			\$ 445,000	

Item	Cost/Unit	Units	Total	Funding Year Needed
Aerial seeding (helicopter only)				
Basin wildrye (trailhead)	\$ 11.00/lb x 5 lbs/ac	450 ac	\$ 25,000	2001
Triticale	\$.20/lb x 14 lbs/ac	450 ac	\$ 1,000	2001
Helicopter contract	\$ 8.00/ac	450 ac	\$ 4,000	2001
SUBTOTAL			\$ 30,000	
Aerial seeding				
Forage kochia (immigrant)	\$ 20.00/lb x 1 lb/ac	10,966 ac	\$ 220,000	2001
Wyoming big sagebrush	\$ 15.00/lb x .50 lb/ac	10,966 ac	\$ 82,000	2001
Aerial seeding contract	\$ 5.00/ac	10,966 ac	\$ 55,000	2001
Seed testing			\$ 4,000	2001
Seed mixing	\$.10/lb	188,000 lbs	\$ 19,000	2001
Seed treatment (fertilizer coating)	\$.20/lb	188,000 lbs	\$ 38,000	2001
Seed storage (rental space)			\$ 10,000	2001
SUBTOTAL			\$ 428,000	
Fence reconstruction (materials/labor)	\$2,000/mi	6 mi	\$ 12,000	2001
Fence materials (new fence)	\$1,800/mi	6 mi	\$ 11,000	2001
Fence construction (new fence)	\$2,000/mi	6 mi	\$ 12,000	2001
SUBTOTAL			\$ 35,000	
Straw check dams				
Weed-free straw bales	\$5/bale	128 bales	\$ 600	2001
Transport charge for bales			\$ 200	2001
Steel rebar	\$.25/ft	780 ft	\$ 200	2001
Labor for installation	\$5,000/WM	1 WM	\$ 5,000	2001
SUBTOTAL			\$ 6,000	

Item	Cost/Unit	Units	Total	Funding Year Needed
Archaeological clearance	\$5,000/WM	11 WM	\$ 55,000	2001
Project layout, supervision, and support	\$5,000/WM	18 WM	\$ 90,000	2001
Monitoring				
Vegetation objective and site				
Stability	\$5,000/WM	3 WM	\$ 15,000	2001, 2002, 2003
Weed monitoring and inventory	\$5,000/WM	8 WM	\$ 40,000	2001, 2002
Cadastral Survey for Private Land - Lakeview			\$ 10,000	
Vehicle cost (mileage)	\$.50/mi + \$270/mo		\$ 15,000	2001
Freight costs (moving seed to and from mixer)			\$ 10,000	2001
Miscellaneous - drill parts, emergency				
Repair, equipment, ATVs, etc.			\$ 10,000	2001
SUBTOTAL			\$ 245,000	
TOTAL			\$1,189,000	

VIII. MONITORING

This area will be monitored for three growing seasons to determine if rehabilitation objectives are being met. Monitoring will be conducted to determine establishment of seeded species as well as response in any unseeded areas that were burned. Current erosion and occurrence of noxious weeds will also be monitored.

Rangeland monitoring will include upland trend and use supervision, and wild horse use. Additional photo trend points and trend monitoring would be implemented to evaluate if emergency fire rehabilitation objectives are met. This would be funded for a minimum of 3 years.

IX. AWP SECTION

See Attachment

X. MAPS

XI. COST/RISK ASSESSMENT

<u>Treatment</u>	<u>Cost</u>
Revegetation	\$ 926,000
Fence Construction, Materials, and Reconstruction Labor	\$ 39,000
All Other Costs (Administrative, Clearances, etc.)	<u>\$ 235,000</u>
TOTAL	\$ 1,210,000

Probability of Rehabilitation Treatments Successfully Meeting Emergency Fire Rehabilitation Objectives

Treatments	Units	NA	%
Drill Seeding	14,271 acres	NA	70
Reconstruct Division and Protection Fence	New fence 6 miles reconstruction	NA	100
Aerial Seed Drainages	450 acres	NA	70

XII. RISK OF RESOURCE VALUE LOSS OR DAMAGE

No Action - Treatments Not 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			
Other	X				

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		

XIII. NATIVE/NONNATIVE WORKSHEET

Proposed Native Plants in Seed Mixture

1. Are the native plants proposed for seeding adapted to the ecological sites in the burned area?
 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?
 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?
 Yes ___ No Rationale: The cost of seed, along with drought tolerance, germination characteristics and ecological site were all considered in selection of native species. These species will not be seeded without crested wheatgrass (nonnative) to establish a ground cover of perennial 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?
 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?
 Yes No Rationale: The area is managed under an adaptive rotational grazing, winter use, and 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?
 Yes No Rationale: This is consistent with existing land use and activity plans. Hycrest crested wheatgrass, Siberian wheatgrass, and forage kochia are the only 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?
 Yes No Rationale: The site will be dominated by cheatgrass, biennial mustards, and possible noxious weed invasion if not seeded. A nonnative, native mix of perennial species will allow ecological processes to function. Additionally, it is imperative to establish a perennial vegetation cover to stabilize use site.

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

Nonnative Plants	Native Plants
1. <u>Hycrest crested wheatgrass/ Siberian wheatgrass (vavilov)</u>	1. <u>Western wheatgrass</u>
2. <u>Forage kochia</u>	2. <u>Bottlebrush squirreltail</u>
3. _____	3. <u>Lewis flax (appar)</u>
4. _____	4. <u>Wyoming big sagebrush</u>

XIV. SUMMARY

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

Proposed Action Yes ___ 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 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.

Alternative(s) 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 Yes ___ No

Rationale for answer: Costs are not high given the comparison of degraded rangeland and future wildfire.

No Action ___ Yes No

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

Alternative(s) Yes ___ No

Rationale for answer: Same as for proposed action.

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

Proposed Action , Alternatives(s) ___, or No Action ___

Comments: The present costs are modest when you consider the high probability of soil loss, future wildfire, and noxious weed invasion without treatment. Also, loss of wildlife habitat and the costs to the private landowners for the public land not being treated.

XV. AMENDED FINDING OF NO SIGNIFICANT IMPACT AND EA DECISION REPORT
(Decision Record Rationale)

AMENDED FINDING OF NO SIGNIFICANT IMPACT
FOR THE
BEATYS BUTTE FIRE
EMERGENCY FIRE REHABILITATION PLAN
EA OR-026-00-35

The Burns and Lakeview Districts, BLM have analyzed a proposal and alternatives, including a no action alternative, for seeding and fencing on-site for accomplishment of emergency rehabilitation of burned BLM and intermixed private lands in the Beatys Butte Fire (M-102) within the Andrews Resource Area, and supported by the Andrews MFP, August 1982. This Amended Emergency Fire Rehabilitation Plan also conforms to the goals of the Warner Lakes MFP (1993). These documents may be reviewed at the Burns and Lakeview District Offices.

The design features and the recommended mitigation measures identified in the attached EA would assure that NO significant adverse impacts would occur to the human environment other than those already addressed in the Andrews MFP and the Warner Lakes MFP. There would be no impacts to sensitive plants or animals, fish or aquatic resources, wetlands, WSAs, Areas of Critical Environmental Concern, air quality, traditional use by American Indians, paleontological resources, prime or unique farmlands, Wild and Scenic Rivers, forested lands, land tenure, or hazardous material sites. None of the alternatives analyzed would have any known secondary, indirect, or cumulative impacts. Adverse effects of the proposal are minimal and of short duration with no residual impact. They are as follows:

- a) minimal soil disturbance
- b) two growing seasons disruption to livestock operator's normal operation in the Beatys Butte and South Steens Allotments. The Blitzen Allotment is unallocated and distance from water in the North Catlow Allotment will provide for no disruption in these allotments.

Determination

On the basis of the information contained in the Amended EA (comments received on the EA (if applicable)), and all other information available to us as summarized above, it is our determination that none of the alternatives analyzed constitutes a major Federal action affecting the quality of the human environment. Therefore, a new EIS or supplement to the existing EIS is unnecessary and will not be prepared.

DECISION RECORD/RATIONALE

Title: The Amended Beatys Butte Fire Emergency Fire Rehabilitation Plan (M-102)

Background: The Beatys Butte Fire (M-102) started on the west side of Beatys Butte spreading to the east side and was wind driven approximately 15 miles northeast across the Catlow Desert with a total of 35,155 acres of intermixed public and private lands being burned. The BLM issued an Emergency Fire Rehabilitation Plan and EA with a Finding of No Significant Impact and Full Force and Effect Decision in September. This amended decision eliminates rehabilitation of acreages of private land larger than 40 acres where approximate equal value goods and services are not provided by the landowner.

Decision: After consideration of the analysis of impacts and mitigating measures of the proposed action and alternatives, our amended decision is to implement the proposed action as follows:

Rangeland drill seed approximately 10,326 acres of public land and approximately 3,945 acres of intermixed private land. The seed mix is nonnative and native all of which are adapted to the specific ecological site. On the intermixed private land parcels larger than 40 acres seeded with public land, the landowners will fund in dollars, in-kind service or a combination of both to provide equal value for the rehabilitation of private land. Of the 3,945 acres of private land proposed for seeding within the Burns District, Roaring Springs Ranch, Inc., owns 3,562 acres. Roaring Springs Ranch, Inc., would provide the tractors and operators and complete the rangeland drilling for 7,600 acres of public land and 3,945 acres of private land within the Burns District. The BLM would provide the rangeland drills and the seed mix to drill seed this acreage. Additionally, the BLM would provide the seed mix (forage kochia and Wyoming big sagebrush) and aerial application of seed for the 7,600 acres of public land and 640 acres of Roaring Springs Ranch, Inc., private land with the Burns District. This is an equal value exchange of goods and services.

The Lakeview District would rangeland seed approximately 2,726 acres of public land and exclude private land using survey documentation. This public land would also be aerial seeded with forage kochia and Wyoming big sagebrush. Additionally, approximately 450 acres of intermixed private and public lands along intermittent drainages on Beatys Butte will be aerial seeded with native species. Also, 32 check dam erosion structures would be placed in West and East Road Gulches to control sediment movement.

All public land within the burn area and cooperatively treated private land would be rested from livestock grazing for a minimum of two growing seasons. The construction of 6 miles protection fence will function as a pasture fence for future management and remain in place after objectives are met. The reconstruction of 3 miles of the District boundary fence, 3 miles of allotment division fences in the Burns District, and the four spring enclosure fences within the Lakeview District would be reconstructed to provide for protection of the burned area. Total funding requested for this rehabilitation is \$1,210,000.

Rationale: The proposed action will provide a perennial vegetation cover of native and nonnative grasses, forbs, and shrubs. These species will compete with cheatgrass and other exotic annuals and occupy the site which will discourage noxious weed invasion. The result would be a more diverse vegetation community. The establishment of these vegetation communities will inhibit reoccurring wildfires and lessen the potential for a catastrophic wildfire in this Wyoming big sagebrush, cheatgrass zone. The establishment of perennial vegetation communities will lessen the potential for accelerated erosion. When the site has an established perennial vegetation community it will, over time, progress toward a native Wyoming sagebrush/bunchgrass community.

The intermittent drainages on Beatys Butte burned hot enough to impact natural revegetation with some sites having soil sterilization. The seeding of Great Basin wildrye, which is the dominant native grass species, with a nurse crop will accelerate the recovery process and possibly avoid accelerated erosion.

The construction of a protection fence/pasture fence versus an on-site temporary protection fence within South Steens Allotment was the most economical and required less fencing. This fence will protect the seeded area until objectives are met and will help accomplish allotment objectives for future management.

The reconstruction of 6 miles of existing District boundary and allotment boundary fence is essential to protect seeded areas during germination and establishment and for continued management of these areas.

This decision is in full force and effect as of this date. Any person who is adversely affected by this decision may file an appeal within 30 days from receipt of this decision in accordance with 43 CFR, Part 4 (see attached Form 1842-1). Any request for a stay of this decision in accordance with CFR § 4.21 must be filed with the appeal.

Andrews Resource Area Field Manager

Date

Lakeview Resource Area Field Manager

Date

XVI. LIST OF PREPARERS/REVIEWERS

A. Participating BLM Staff

Les Boothe, Range Management Specialist, Lakeview
Miles Brown, Andrews Resource Area Manager
Jim Buchanan, Range Management Specialist/Ecologist
Rick Hall, Natural Resource Specialist
Robert Hopper, Supervisory Range Management Specialist, Lakeview
Barbara Machado, Hydrologist
Matt Obradovich, Wildlife Biologist
Jeff Rose, Fire Ecologist
Cam Swisher, Environmental Protection Specialist
Scott Thomas, Archaeologist
Evelyn Treiman, Outdoor Recreation Planner

XVII. EFR PROJECT SUMMARY

Beatys Butte Fire (M-102)

Fire Name: Beatys Butte Fire

Fire Control Date: July 16, 2000

Total Acres Burned: 35,155

Acres BLM Burned: 22,758

Start of Rehabilitation: October 2000

Completion of Rehabilitation: February 2001

Miles of New Fence: 6

Miles of Fence Rebuilt: 6

Number of Soil/Watershed Structures: 32

Acres Reforestation: NA

Acres of Revegetation: 14,271

Acres of Burned Area Protected for Natural Regeneration: 20,884

Total Acres Rehabilitated: 35,155

Estimated Funding FY00: Authorized Start-up Costs

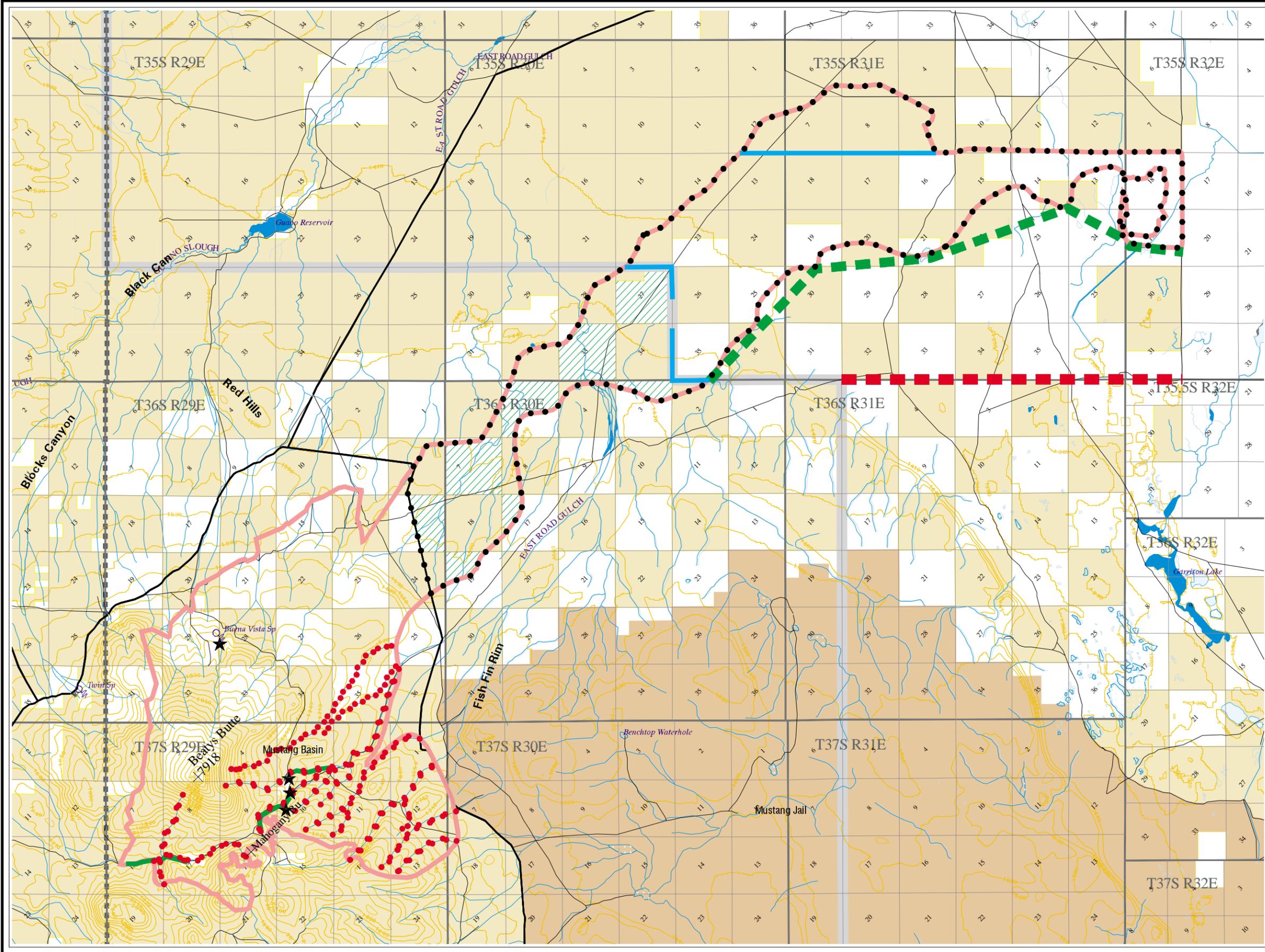
Estimated Funding FY01: \$1,159,000

Estimated Funding FY02: \$ 25,000

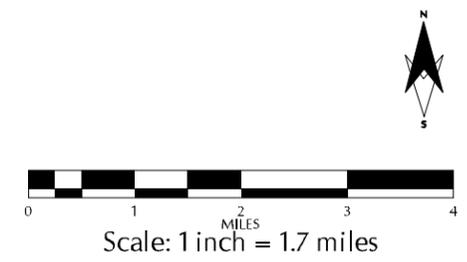
Estimated Funding FY03: \$ 5,000

Estimated Funding FY04: \$ 0

Beatys Butte Fire Rehabilitation



-  BLM Lands
-  Private Lands
-  Wilderness Study Areas
-  Excluded From Drill and Aerial Seed
-  Fire Perimeter
-  Lakeview/Burns District Line
-  Proposed Action Protection Fence
-  Alt 2 Protection Fence
-  Fence Reconstruction
-  Drill and Aerial Seed
-  Aerial Seed Drainages
-  Gulches With Check Dams
-  Spring Enclosure Reconstruction



US DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Burns District, Oregon
 No warranty made by the BLM for use of the data for purposes not intended by the BLM.
 Date: 12-OCT-2000
 \$KEL/firebeaty825.aml
 Burns BLM GIS, Kelly Hazen