

# Environmental Assessment

Title: Removal, Replacement, Reconstruction of Existing Fences

Environmental Assessment (EA) Number: OR-050-06-067

Date of Preparation: October 2, 2006

Name and Location of Preparing Office: Prineville District, Bureau of Land Management, Prineville, Oregon

## Project Area

Existing fence corridors on BLM-administered lands within the administrative boundary of the Prineville District, Bureau of Land Management, in the State of Oregon, except those located within Wilderness Study Areas. Appendix A shows the project area.

Within these corridors are fences associated with campgrounds; vehicle, livestock and wildlife exclosures; grazing allotment and pasture boundaries; spring developments; vehicle management areas; and other features.

## Introduction

This Environmental Assessment (EA) includes an analysis of potential impacts that could result from the implementation of a proposed action or an alternative to the proposed action. The EA assists the BLM in project planning and ensuring compliance with the National Environmental Policy Act (NEPA), and in making a determination as to whether any “significant” impacts could result from the analyzed actions.

“Significance” is defined by NEPA and is found in regulation 40 CFR 1508.27. An EA provides evidence for determining whether to prepare an Environmental Impact Statement (EIS) or a “Finding of No Significant Impact” (FONSI). A FONSI is a document that briefly presents the reasons why implementation of the proposed actions will not result in “significant” environmental impacts (effects) beyond those already addressed in the John Day (1985), Two Rivers (1986), Baker (1989) Brothers/La Pine (1989) and Upper Deschutes (2005) resource management plans (RMP’s). If the decision maker determines that this project has “significant” impacts following the analysis in the EA, then an EIS would be prepared for the project.

A decision record (DR) may be signed following public comment on the EA to document the decision.

## 1.0 PURPOSE AND NEED FOR ACTION

### 1.1 Purpose of the Action

The purpose of the Proposed Action described herein is to assist Prineville District BLM personnel, permittees, cooperators, volunteers and others in maintaining current wildlife, fish, watershed, recreation, rights-of-way, rangeland management, and other BLM programs that are reliant upon or related to existing fences.

The Proposed Action includes the following proposals:

1. Removal of fences no longer required for land management purposes.
2. Reconstruction of existing fences. “Reconstruction” is defined herein as the selective removal and/or re-arrangement of some (but not all) of the major components of an existing fence, and installation of new components accordingly.
3. Replacement of existing fences. “Replacement” is defined herein as the removal of an existing fence in its entirety, and building a new fence to replace it.

## **1.2 Need for the Action**

Existing fences are necessary to facilitate and support recreation, riparian, fish and wildlife habitat, livestock grazing, rights-of-way and related BLM management programs. As these fences age, they will require replacement or reconstruction. Or, based upon a change in the environment, they may no longer be necessary for management and therefore need to be removed.

## **1.3 Scoping**

No scoping was performed in connection with this proposal.

## **1.4 Issues**

### **A. Impacts to Wildlife**

Fences can pose a barrier to wildlife, causing disruption of their movement and risk for their injury, entanglement, or death. At the same time, fences are management tools which can help achieve a variety of wildlife goals and objectives.

### **B. Visuals Management**

In visually sensitive areas, fence corridors can contrast with the surrounding natural features, thereby impacting scenic quality.

## **1.5 Conformance and Consistency**

The John Day (1985), Two Rivers (1986), Baker (1989), Brothers/La Pine (1989) and Upper Deschutes (2005) RMP's each include fences as structural elements of their associated management programs. In that this proposal would facilitate the continued accomplishment of these programs, it conforms to and is consistent with these RMP's.

## **2.0 ALTERNATIVES, INCLUDING THE PROPOSED ACTION**

### **2.1 No Action Alternative**

Existing fences which are currently not repairable or otherwise not needed for management purposes would be left on site, and allowed to naturally deteriorate.

Existing fences required for management would continue to be maintained until the degree level of structural deterioration rendered these fences as being non-repairable. At this point in time, fence components would be left on-site, and allowed to naturally deteriorate.

### **2.2 Proposed Action**

Prior to initiating work on a given fence, a determination would be made concerning whether or not the fence was needed for future management purposes. The following would govern subsequent project actions.

#### **A. Removal of Existing Fences**

When existing fences were no longer needed for management purposes, they would be removed in their entirety, and any appropriate fence corridor rehabilitation (such as seeding, waterbarring, or slash spreading) would be completed.

Unserviceable, non-bio-degradable materials from these fences would be hauled to a public landfill site or be re-cycled. Serviceable materials would be transported to other sites for re-use.

#### B. Reconstruction of Existing Fences

Fences proposed for reconstruction would be evaluated, and a determination made concerning the adequacy of the existing fence design for the current management environment. Such an evaluation could include one or more of the following of the following factors:

- Human Risks. (For example, an existing steel-post/barbed-wire fence design might be inappropriate near a popular camping site)
- Livestock Grazing Management Requirements. (For example, an existing 3-wire, barbless-wire fence design might be insufficient to hold livestock in a given pasture area)
- Wildlife. (For example, an existing fence's top wire height of 48 inches might pose risks for animal entanglements and mortality).

Fence design specifications would be modified accordingly.

Unless otherwise precluded, the following specifications would normally be applied to wire fence reconstruction projects:

1. Where wire is to be replaced, and where barbed wire was not otherwise required, barbless or high-tensile wire would be used.
2. Where fence posts or wire are to be replaced, the following wire spacing specifications would normally be used:
  - 3-wire fences: 18, 26 and 38 inches above soil surface
  - 4-wire fences: 16, 22, 28, and 40 inches above the soil surface (deer/elk habitat requirements a priority); 18, 24, 28 and 38 inches above the soil surface (antelope habitat requirements a priority)
3. The minimum amount of vegetation would be cut or cleared. Normally, trees within 5 feet of the fence line would be pruned or removed. Forbs, graminoids and smaller shrubs would not be removed - but could be subject to trampling during fence reconstruction activities.

Selected, unserviceable components of the existing fence would be removed from the site, and hauled to a landfill site or be re-cycled.

New components would be installed on the existing fence according to design specifications developed for that fence.

#### C. Replacement of Existing Fences

Existing fences targeted for replacement would be removed in their entirety. Unserviceable materials from these fences would be hauled to a public landfill site or be re-cycled. Serviceable materials would either be used in the replacement fence, or transported to other sites for re-use.

The construction of the replacement fence would be subject to the same site evaluation and design considerations described in Paragraph 2.2B above.

Normally, replacement fences would be built in the same location as the removed (old) fence. However, situations might arise where resource benefit, cost, efficacy, human safety or other factors might benefit from

locating the replacement fence in a different location than the existing fence. Examples of this include the following:

- An old fence crosses a drainage used by sage-grouse as a flyway. Constructing the new fence outside this drainage might reduce risks for bird collisions.
- A streambank under an old enclosure fence has eroded away, thereby eliminating support for the replacement fence. Building the fence further away from the stream channel reduces risk for erosion damage to the new fence.
- An old fence is located along a circuitous route. Building the new fence on a more direct route could reduce the net mileage (and cost).
- Use in a fenced recreation site has increased. Building the replacement fence further from the core use area could improve human accommodation and safety.
- An existing fence is located on a ridgeline in a visually sensitive area. Visuals management objectives could be better met by setting the replacement fence back off the ridgeline.
- An existing fence does not follow land ownership or allotment boundaries. By building the replacement fence consistent with recognized boundaries, potential land tenure issues could be resolved.

#### D. General

Each of the above activities would include foot, vehicle, equipment, livestock, and in some cases, boat or helicopter use. Such use would be related to the following activities:

- Pick up and transportation of old and new fence materials from and to project sites
- Post hole digging, wire running and stretching
- Clearing of vegetation

The above fencing activities would also include (as necessary) the relocation of signs or other facilities (such as around campgrounds or trails), in order to ensure that signing and facilities objectives would continue to be met. Livestock use durations, frequencies, and/or stocking levels (animal unit months) would be adjusted as required to reflect changes in pasture/allotment use patterns, carrying capacities, or other situations resulting from fence removals, relocations, or related actions. Such actions would proceed only upon the approval of the Field Manager.

No work in a given area could proceed without approval of a Field Manager, who would determine the level and scope of interdisciplinary review required for a given project.

Wildlife, Botanical, Fisheries and Cultural Resource clearances would be required prior to any work in a given area being initiated. Seasons and kinds of human activity within a given area would conform to that specified in the RMP applicable for the respective work area. In visually sensitive or recreation-intensive areas, similar clearances by Recreation/Visuals Management specialists would be required. Measures specified in individual clearance reports would be adhered to.

All fence-related actions would include those monitoring actions specified in the respective RMP's.

Both public and other agency/governmental entities interested in BLM fence programs in a particular project area would be invited to participate in project design and implementation activities.

#### E. Mitigation/Coordination Measures

The following would be adhered to during the course of the above described activities:

##### Soil/Vegetation/Watershed

1. Contractors or other project entities would be given a noxious weed information pamphlet; be required to ensure their vehicle and equipment were checked for weed matter prior to entering the project area; and requested to report any weed discoveries in their work areas. Any weed sighting information would be forwarded to the District Noxious Weed Coordinator for follow-up action.
2. Surface disturbance would be held to a minimum and be rehabilitated to blend with surrounding soil surfaces. Emphasis would be placed on avoiding repeated entry of vehicles or equipment on sites where this activity previously occurred.
3. Work activities would be scheduled to minimize compaction and rutting to road surfaces.
4. Neither old growth juniper trees nor any other species of tree showing obvious signs of wildlife occupation would be felled.
6. Natural materials (such as vegetative matter from fence line clearing work) would be applied to new vehicle tracks and other vehicle/equipment activity areas.
7. Neither bulldozer nor other heavy equipment use would not be allowed.

##### Fish and Wildlife

1. Unless otherwise approved by the Field Manager, fencing activities within 4 miles of sage-grouse leks during the sage-grouse nesting period would be avoided.
2. When possible, treatment activities would occur outside of the reproductive period for neotropical migratory birds (April 15 through July 30), especially in areas near springs or other high-quality nesting areas.
3. Should the fish or wildlife situation change (such as new species found to be present or the status of a species changes), additional operational restrictions might be applied.
4. A BLM Wildlife Biologist would be notified if ferruginous hawks, or goshawk nests or individual birds, are discovered prior to or during fencing project. The biologist would determine appropriate protection measures; treatment activities would be adjusted accordingly.
5. For activities within one mile of eagle nests (during critical reproductive periods), seasonal operating restrictions would be in place between February 1 and August 31.

##### Cultural Resources

1. Cultural resource inventory methods would be in accordance with OR BLM/SHPO standards and protocols.
2. All observed and recorded cultural resources determined to be at risk from project activities would be protected from damage or disturbance.
3. Trees having historical significance (survey trees, blaze trees, juniper structures, etc.) would be retained.

##### Recreation/Visuals Management

1. In visually sensitive areas, efforts would be made to blend the fence in with the surrounding environment. Examples of potential actions include the following:
  - Use of gray or brown fence posts
  - Routing fences behind visual obstacles (such as trees or shrubs)
  - Placement of braces or other fence components away from topographic crests (such as ridgelines and/or rimrocks).
2. In heavy recreation use corridors, gates and stiles would be installed in a manner that facilitates ease of visitor passage.

### **2.3 Actions Common to the Proposed Action and the No Action Alternative**

All administrative (including monitoring) and operational actions specified in the RMP's would continue.

### **2.4 Achievement of Purpose and Addressing the Need**

During the next 15 to 20 years, both the Proposed Action and No Action Alternative would achieve the aims specified in Paragraphs 1.1 and 1.2. Since the No Action Alternative would lead to deterioration of the fence infrastructure, it would not meet the purpose and need beyond this time period.

### **2.5 Alternatives Considered but Eliminated from Further Study**

No other alternatives were considered during the development of this EA.

## **3.0 AFFECTED ENVIRONMENT**

The Prineville District is located in the central and north-central portions of Oregon, and includes over 1.5 million acres of public land in eleven counties.

A detailed description of the affected environment can be found in the RMP's listed in Paragraph 1.5 and their accompanying environmental impact statements, all of which are on file and available for review in the Prineville District BLM Office.

## **4.0 DIRECT AND INDIRECT EFFECTS**

### **4.1 Soil/Vegetation/Watershed/Riparian/Water Quality/Wetland Areas**

#### **A. No Action**

Although fence maintenance would help meet short-term management needs, aging and natural deterioration of the fence infrastructure would lead to diminished control and management of vehicles and livestock. This would elevate risks for soil and upland and riparian vegetation damage; accelerated sheet, rill, gully and stream channel erosion; and degradation of water quality.

When fences achieved a state of no longer being maintainable, vehicle and other human activities within the fence corridors would cease. Cessation of these activities would reduce the risk of weed importation and spread into the existing fence corridor. However, in areas outside these corridors, decreased vehicle control and management (resulting from fence deterioration) could lead to accelerated weed importation and spread.

#### **B. Proposed Action**

The kind and amount of tree and tall shrub vegetation would decrease immediately following fence line clearing associated with reconstruction or replacement activities. Normally, these plants would re-establish within 5 to 10 years following these activities. Localized soil disturbance would increase risks for soil movement in these areas. As vegetation re-occupied these sites, risks for future soil loss would diminish.

The Proposed Action would facilitate continued vehicle and livestock grazing management, thereby helping maintain current programs designed to improve watershed-related resources.

Current noxious weed importation and spread rates would not be expected to change as a result of this action.

## **4.2 Fish and Wildlife**

### **A. No Action**

A long-term reduction in the amount and extent of existing fences would result in:

- Reduced risks for wildlife entanglement and mortality from standing fence presence
- Increased risks for wildlife entanglement in downed wire - in dilapidated fences
- Less wildlife disturbance from repetitive vehicle and equipment use in existing fence corridors
- Increased wildlife hiding cover within the fence line corridors
- Increased risks for fish/wildlife disturbance and habitat component damage from uncontrolled vehicle or livestock use
- Loss of the ability to monitor and evaluate wildlife vs. livestock shrub use levels (in established wildlife/livestock exclosure areas)

### **B. Proposed Action**

Maintaining the size and extent of the existing fence infrastructure would:

- Keep risks for human-caused disturbance, and wildlife cover within fence corridors at about current levels.
- Enable BLM to continue meeting or moving towards habitat goals and objectives shown in the RMP's.
- Keep wildlife hiding cover within fence corridors at about current levels.
- A slight reduction of risks for wildlife-fence entanglements/mortality would occur from the removal of fences no longer needed for management; and the implementation of fence reconstruction/replacement standards reflecting wildlife crossing requirements.

## **4.3 Special Management Areas (SMAs)**

These include Areas of Critical Environmental Concern, Research Natural Areas, Wild and Scenic Rivers and Wilderness Study Areas.

### **A. No Action**

The eventual reduction of existing fence infrastructure (and the associated vehicle/human use in fence corridors) would over time complement the scenic and primitive recreation values often associated with these areas. Such deterioration would also increase risk for uncontrolled vehicle and livestock use, thereby presenting risks for damage to the unique biological, physical and archaeological attributes that these areas possess.

Deteriorated fences would persist for decades in these areas, and to some visitors, might appear as eyesores.

### **B. Proposed Action**

Retention of existing fence infrastructures would continue to impact scenic and primitive recreation values in SMAs where these values are emphasized. At the same time, these fences would enable the BLM to continue closely managing human uses in a manner that meets individual SMA goals and objectives, such as those relating to special status plants and research activities.

The active removal of fences no longer necessary for SMA management would tend to benefit scenic and primitive recreation values within these areas.

#### **4.4 Historic/Archaeological Resources**

##### **A. No Action**

Allowing the natural deterioration of the fence infrastructure would pose no direct effects to either historical or archaeological resources. However, in that such deterioration might increase human access potential in a given area, indirect effects to these resources (such as theft or vandalism) could occur.

##### **B. Proposed Action**

Fence activities involve vehicle use, vegetation clearing, digging and related actions. Each of these present risks for damage, displacement, or destruction of these resources. However, direct impacts to sites would be mitigated through inventory, recording and avoidance strategies employed prior to implementation.

Maintenance of the current fence infrastructure would help control off-road vehicle use; at the individual site level, this would help reduce risks for impacts to individual cultural resource sites.

#### **4.5 Fire and Fuels**

##### **A. No Action**

Fence presence can elevate both fire suppression response times and fuels management costs. This is because fences can become obstacles to fire suppression vehicles and equipment; and, during prescribed burning operations, extra costs are incurred in preventing immolation of fences. Thus, the gradual decline in the size and extent of the fence infrastructure would directly benefit both these program activities.

At the same time, a decline in fences would also increase risk for unplanned off-road vehicle use, thence unplanned ignitions and wildfire. Declines in the fence infrastructure would also reduce opportunities for integrating fuels and livestock grazing management, since the latter could not be as tightly controlled as at the present time.

##### **B. Proposed Action**

Retention of the current fence infrastructure would continue to impact both fire suppression and fuels management activities. The effects would be the opposite of those described above.

#### **4.6 Recreation**

##### **A. No Action**

In the short term, this alternative would provide for the management, control and public enjoyment of recreation resources and activities.

In the long term, as fences deteriorated, several effects would become apparent:

- Livestock would gain access into formerly fenced campgrounds
- Vehicle and recreational livestock access opportunities would increase
- The ability to manage vehicle, camping and related recreation use would decline

## B. Proposed Action

Current recreation use and management would not be altered. Some benefits would accrue from upgrading fences in a manner that improves the ease of user passage through them.

### **4.7 Visual Quality**

#### A. No Action

Existing fence corridors would become naturally re-vegetated, and over time, normally become indistinct from the surrounding landscape. This would lend to a more natural appearance for the public land visitor. However, deteriorated fence remnants (such as posts or wire) would remain visible for decades.

#### B. Proposed Action

Existing fence corridors would remain apparent, and continue to contrast with the surrounding landscape. In those areas where fences were permanently removed, the respective corridor would over time evolve into a more natural appearance.

### **4.8 Livestock Grazing**

#### A. No Action

In the short term, there would be no effects on this activity. In the long term, several effects would become apparent:

- A decline in the ability to use livestock as a management tool
- Increased grazing durations in and potential damage to key (such as riparian) areas
- Increased BLM and grazing permittee management costs
- Increased incidents of livestock loss or injury (such as from vehicle/livestock collisions on unfenced highway corridors; straying through unfenced allotment boundaries; or by entanglement in old fences)

#### B. Proposed Action

This would facilitate the continuation of grazing management programs defined in the RMP's. However, overall grazing management would be enhanced, and the risks identified in Paragraph 4.8.A above eliminated or reduced.

### **4.9 Human Safety**

#### A. No Action

Over time, direct hazards standing fences can present to people on foot, on stock, or in vehicles would decline. However, a similar hazard that downed fences can present would be present for decades.

Deterioration of fences along major vehicle travel arteries (such as highways) would lead to elevated risks for potentially fatal livestock and automobile collisions.

## B. Proposed Action

The safety hazards that existing fences currently present would remain generally unchanged, except that upgraded designs and active removal of unneeded fences would, over time, help reduce these hazards.

The continued presence of fences along major vehicle travel corridors would help minimize the risks for livestock/motor vehicle collisions.

### **4.10 Critical Elements**

The following critical elements were considered, but were not addressed because they would either not be affected or do not exist in the project area:

1. Prime or Unique Agricultural Lands
2. Energy Resources and Transmission (Executive Order 13212)
3. Environmental Justice (Executive Order 12898)
4. Native American Religious Concerns
5. Wastes, Hazardous or Solid
6. Air Quality

### **5.0 CUMULATIVE EFFECTS**

No need to exhaustively list all individual past actions or analyze, compare, or describe their environmental effects has been identified. There are no known current or predicted future actions within or surrounding the project area that, when coupled with the actions described in this environmental assessment, would lead to effects beyond those already described in this EA and the environmental impact statements for those RMP's listed in Paragraph 3.0.

The current conditions on lands potentially affected by the Proposed Action and No Action Alternative result from a multitude of natural and human events that have taken place over many decades. A complete and detailed description and analysis of all events and their effects is not possible to compile, would be unduly costly to explore in detail, and would not provide any clearer picture of the existing environment.

Key past events believed to have shaped current environmental conditions in the project area include weather cycles; increased human settlement; exploitative livestock grazing practices of the late 1800's/early 1900's; subsequent changes to livestock grazing strategies; general exclusion of unplanned fire from the project area; and, during the 1980's, completion of mechanical and prescribed burning treatments.

When coupled with past actions, implementation of the Proposed Action would help ameliorate outcomes of past practices by supporting and facilitating those recreation, wildlife, fish, range, livestock grazing and other program activities specified in the RMP's. The associated actions would also complement earlier efforts (such as recreation use and livestock grazing management plans) designed to enhance user benefits and environmental conditions.

The above information on individual past actions and events is anecdotal only, and is not a scientifically acceptable methodology for quantifying, illuminating or predicting all the cumulative effects of the Proposed Action and its alternative.

## **6.0 CONSULTATION AND COORDINATION**

The Proposed Action and its alternative and their analyses were formulated in part based on past governmental/public/other agency comments, opinions, concerns, publications and observations relating to fences that have accumulated over the years. Such input was received during planning processes, meetings, seminars, informal discussions, field tours, publication review and through correspondence. Contributors of this information to date include representatives from County Governments, Oregon Department of Fish and Wildlife, U. S. Fish and Wildlife Service, Oregon State University (OSU), U.S. Forest Service, various County Extension Offices, grazing permittees, and adjacent private land owners.

## **7.0 PREPARERS AND REVIEWERS**

The following BLM personnel contributed to the development, design, coordination and/or review of this environmental assessment:

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### **Appendix:**

A - Prineville BLM District Map

