

APPENDIX E

EMERGENCY STABILIZATION AND REHABILITATION PROCEDURES

INTRODUCTION

The purpose and need of a normal fire rehabilitation plan is to streamline the emergency fire rehabilitation process to enable on-the-ground treatments to be completed within time frames consistent with the urgent nature of fire rehabilitation. The normal fire rehabilitation plan facilitates the orderly and timely rehabilitation of burned lands by delineating the procedures to be followed and treatments to be used after wildland fires that occur on the DFO.

Appropriate use of emergency fire rehabilitation funds includes implementing the following practices to:

- Protect life, property, and soil, water and/or vegetative resources.
- Prevent unacceptable onsite or offsite damage.
- Facilitate meeting land use plan objectives and other Federal laws.
- Reduce the invasion and establishment of undesirable or invasive species of vegetation.

Emergency fire rehabilitation funds are not used for rehabilitation of wildland fire suppression efforts; this includes rehabilitating firelines, helispots, fire camp, etc. Costs for rehabilitating wildland fire suppression efforts will be funded by the wildland fire project code.

The terms *rehabilitation* and *restoration* are often used synonymously, especially in relationship to the use of native species to revegetate burned areas. Rehabilitation is the “repair” of a wildland fire area utilizing native and/or nonnative plant species to obtain a stable plant community that will protect the burned area from erosion and invasion of weeds. Restoration is the use of a diverse mixture of only native species to obtain a plant community that is similar in appearance and function to the historic vegetation.

Total restoration of a burned area is not within the scope of the emergency fire rehabilitation program, although the use of native plants to rehabilitate burned areas is strongly encouraged. Native plants are to be used on those soils and ecological sites where they are, (1) adapted, (2) able to establish and survive with weed competition and periodic drought; (3) compatible with other land uses, and (4) reasonably priced relative to the land use and emergency fire rehabilitation plan objectives. The application of emergency fire rehabilitation practices should be consistent with the S&G’s in as much as the constraints of emergency fire rehabilitation policy will allow.

This plan guides emergency wildland fire rehabilitation efforts in areas of the DFO that meet one or more of the following criteria:

- Areas that are highly susceptible to accelerated soil erosion, either because of soil characteristics, steep topography, or recurrent high winds.
- Areas where native grasses and forbs cannot reasonably be expected to provide soil and watershed protection within two years following fire.
- Areas where unacceptable vegetation, such as noxious weeds or invasive annuals, may readily invade and become established following fire.
- Areas where shrubs are a crucial wildlife habitat component for greater sage-grouse, mule deer, elk, and pronghorn.

The process for implementing emergency fire rehabilitation activities through a site-specific plan development process is described as follows:

- 1) Following a wildland fire, the area manager, consulting with resource specialists, will decide if fire rehabilitation is needed. If fire rehabilitation is needed, an interdisciplinary team reviews the burn and selects the proper rehabilitation prescription from this plan. (If the proper prescription does not fall under the scope of this plan, refer to the “Emergency Fire Rehabilitation Handbook” [H-1742-1] for guidance. Generally, rehabilitation efforts not covered in this plan would require an environmental assessment.)
- 2) The prescription identifies the appropriate seed mixture, application rates, planting methods, and costs. The prescription also describes any additional treatments that may be necessary including shrub planting, erosion control structures, protection fencing, and grazing adjustments beyond the normally prescribed minimum two growing seasons rest period.
- 3) A budget is created that summarizes the rehabilitation costs by fiscal year. This budget is sent to the State Director for funding approval.
- 4) For all rehabilitation projects covered by this plan, a site-specific rehabilitation plan will be prepared that is tiered to this plan. Additionally, each rehabilitation project requires a normal fire rehabilitation plan treatment form.
- 5) Cultural and T&E species clearances will be completed prior to project implementation. Known populations of

T&E plants will be marked and that area restricted from heavy equipment use. Cultural sites discovered during clearances or previously known sites will be marked and avoided by ground disturbing equipment.

Due to the broad spectrum of situations encountered in emergency fire rehabilitation, several options of possible treatments, either separately or in combination, must be considered. The list of activities that may be considered are outlined below.

NATURAL REVEGETATION

In many cases, successful reestablishment of native species occurs if the perennial plant species are not killed as a result of the fire, or if viable and desirable seed or root mass is present. Generally, in these areas it would be necessary to rest the burned area from livestock grazing for at least two growing seasons. In some situations, the area may be closed to vehicles by issuing a temporary emergency closure. The only rehabilitation that may be necessary is repairing damaged fencing and/or construction of temporary fencing around the burned area until the native vegetation is successfully reestablished.

SEEDING WITH RANGELAND DRILLS OR AERIAL SEEDING

Seeding of burned areas would only be considered if the emergency fire rehabilitation team determines that the burned area would not successfully reestablish to a native perennial plant community in a reasonable amount of time (generally two growing seasons under normal precipitation). Seed mixtures should be designed for specific soil types. Parameters such as soil properties, erosion potential, aspect, elevation, intended use, potential plant community, threat to existing watershed, and seed cost and availability would be evaluated in selecting seed mixtures.

The use of native plants for rehabilitation is strongly encouraged and is both BLM emergency fire rehabilitation policy and a standard for meeting rangeland health objectives. That policy is tempered, however, by the availability of native seed at a reasonable cost, its adaptation to the area proposed for treatment, impacts of competition on seeding establishment, and land use plan requirements. There are many areas where one or more of these criteria cannot be met, and the only choice is between seeding nonnative, such as crested wheatgrass and noxious weeds becoming established in the disturbed areas. Given these situations, the use of nonnatives is allowed to biologically and physically stabilize the burned area until the earliest possible time when

the introduced grass seedlings can be restored (converted) to a more diverse native plant community. Where available, native seed should be used in combination with nonnatives to complete a diverse mix of species to meet particular land use objectives for the site.

Seeding guidelines:

- Native species will be utilized over nonnative species as appropriate and based on seed availability.
- A project inspector will monitor all phases of implementation.
- The area to be seeded will be rested from grazing for at least two growing seasons or until vegetation is successfully established. Livestock will be excluded by using fencing, closing specific pastures, or closing entire allotments.
- Only native species will be seeded in WSAs.
- Monitoring will determine the effectiveness of seeding and to indicate when grazing will resume.
- Use only certified weed-free sources and collect seed samples for an All States Noxious Weed Test. Seed nonnatives only in areas of the burn where high erosion or unacceptable vegetation is expected to occur. This may include, but not be limited to, roads, gullies, noxious weed areas, or cheatgrass sites. This will allow refugia for native species where they can reestablish without competition from nonnative species.
- If nonnative species are used, a preference should be given to species that are not invasive and can be replaced naturally by native shrubs and grasses. If this is inappropriate or is ineffective, a commitment should be made for long-term secondary restoration of a site following planting of nonnatives.

CONSTRUCTION OF EROSION AND SEDIMENT CONTROL STRUCTURES

Where the possibility of damage is great, structures, such as retention dams, or land treatments, such as contour furrowing, may be needed to control erosion, sediment yield, and flood waters. In most cases, these treatments would be used in combination with seeding. Gully check dams or plugs may be required where headcutting erosion is occurring. Gully treatment may also include broadcast seeding and chaining to establish perennial vegetation on the channel sides and bottom. Planning, design, and construction of erosion and sediment control structures and flood water retarding structures will be implemented in accordance with BLM Manual 1972, Water Control Structures. Any erosion and sediment control structures proposed within a WSA must comply with wilderness IMP.

CONSTRUCTION OF SUPPORT FACILITIES

Fences, gates, cattle guards, and other control features will be constructed or repaired as needed to further natural revegetation, and to protect seedings or other improvements created for rehabilitation. Follow BLM Manual Handbook H-1741-1 for fencing specifications. Any construction of support facilities proposed within a WSA must comply with wilderness guidelines.

FIRE REHABILITATION GUIDELINES FOR WILDERNESS STUDY AREAS

Rehabilitation following wildland fire in a WSA will comply with wilderness IMP (H-8550-1). When a proposed rehabilitation project addresses an area covering land both within and outside a WSA, it will be treated as two separate projects. The area outside the WSA will be treated in accordance with this guide. The area inside the WSA will be treated in accordance with the wilderness IMP referenced above.

Interested parties will be allowed a 30-day comment period on the proposed treatment in WSAs, unless it is not possible to do so because of emergency conditions (i.e., the 30-day comment period would result in missing the optimum period for treatment). If a full 30-day period would result in missing the optimum period for rehabilitation, key contacts would be notified for immediate comment, and a follow up copy of the treatment prescription would be forwarded.

Disturbance caused by fire suppression actions will be evaluated in WSAs. If it is determined that wilderness suitability is affected by the fire suppression disturbance, mitigation of the disturbance will occur prior to release of suppression resources. Costs associated with mitigating suppression actions will be covered by wildland fire suppression funds, not emergency fire rehabilitation funds.

The “minimum tool” will be applied to all fire rehabilitation projects within WSAs. Any rehabilitation actions must maintain an area’s suitability for preservation as wilderness. Fire rehabilitation should be accomplished using methods and equipment that causes the least damage to wilderness resources. The use of motorized vehicles and mechanical equipment will be minimized to the extent possible.

The appropriate species and methods for seeding will be considered on a case-by-case basis to determine if the proposed method meets the policy and guidelines for WSAs. Seed and planting will utilize native species, and will minimize cross-country use of motorized equipment. Seedings and plantings will be staggered or irregular so as to avoid a straight-line plantation appearance. Seed will be applied aerially unless the area to be rehabilitated is small, or ground application will not impair wilderness characteristics. Because the covering of seed greatly affects its successful germination, mechanized equipment may be considered to cover the seed after aerial application. If the burned area is determined to be crucial wildlife habitat, and shrub seed is not applied aerially, then seedlings may be hand planted.

