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Subject

H-1742-1 – BURNED AREA EMERGENCY STABILIZATION AND REHABILITATION HANDBOOK - (Public)

1. Explanation of Material Transmitted: This Handbook provides specific guidance for policies, standards, and procedures used in the Burned Area Emergency Stabilization and Rehabilitation (ES&R) programs. It is intended to be the primary guidance for activities related to the objectives, authorities, responsibilities, and policy considerations outlined in the Department of the Interior Departmental Manual 620 DM 3 Wildland Fire Management Burned Area Emergency Stabilization and Rehabilitation.

2. Reports Required: None.

3. Material Superseded: Manual pages superseded by this release are listed under "REMOVE" below. No other directives are superseded.

4. Filing Instructions: File as directed below.

REMOVE:	INSERT:
All of Rel. 1-1661	All of H-1742-1
(Total: 59 sheets)	(Total: 43 sheets)

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United States
Department of the Interior
Bureau of Land Management

BURNED AREA EMERGENCY STABILIZATION and REHABILITATION

BLM Handbook H-1742-1

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I. Introduction

A. Purpose of this Handbook

This handbook provides detailed information specific to Bureau of Land Management (BLM) policies, standards, and procedures used in the Burned Area Emergency Stabilization and Rehabilitation (ES&R) programs. This Handbook is intended to be the primary guidance to BLM ES&R activities. It is tiered to the Department of the Interior (DOI) Departmental Manual 620 DM 3 Wildland Fire Management Burned Area Emergency Stabilization and Rehabilitation relative to planning and implementing ES&R projects on public lands administered by the BLM. This guidance incorporates all pertinent information from the Interagency Burned Area Emergency Response and the Interagency Burned Area Rehabilitation Guidebooks.

B. Program Objectives, Priorities, and Allowable Actions

Emergency Stabilization

Emergency stabilization is defined as "Planned actions to stabilize and prevent unacceptable degradation to natural and cultural resources, to minimize threats to life and property resulting from the effects of a fire, or to repair/replace/construct physical improvements necessary to prevent degradation of land or resources. Emergency Stabilization actions must be taken within one year following containment of a wildland fire." (620 DM 3.3E)

The objective of emergency stabilization is: "To determine the need for and to prescribe and implement emergency treatments to minimize threats to life or property or to stabilize and prevent unacceptable degradation to natural and cultural resources resulting from the effects of a fire." (620 DM 3.4A)

The protection priorities of emergency stabilization are: 1) Human Life and Safety, and 2) Property and unique biological resources (designated Critical Habitat for Federal and State listed, proposed or candidate threatened and endangered species) and significant heritage sites. (620 DM 3.7A)

Allowable emergency stabilization actions are limited to the following items, grouped by issue topic:

Human Life and Safety

- Replacing or repairing minor facilities essential to public health and safety when no other protection options are available.

Soil/Water Stabilization

- Placing structures to slow soil and water movement.
- Stabilizing soil to prevent loss of degradation or productivity.
- Increasing road drainage frequency and/or capacity to handle additional post-fire runoff.
- Installing protective fences or barriers to protect treated or recovering areas.

Designated Critical Habitat for Federal/State Listed, Proposed, or Candidate Species

- Conducting assessments of critical habitat in those areas affected by emergency stabilization treatments.
- Seeding or planting to prevent permanent impairment of designated Critical Habitat for Federal and State listed, proposed or candidate threatened and endangered species.

Critical Heritage Resources

- Conducting assessments of significant heritage sites in those areas affected by emergency stabilization treatments.
- Stabilizing critical heritage resources.
- Patrolling, camouflaging, burying significant heritage sites to prevent looting.

Invasive Plants

- Seeding to prevent establishment of invasive plants, and direct treatment of invasive plants. Such actions will be specified in the emergency stabilization plan only when immediate action is required and when standard treatments are used that have been validated by monitoring data from previous projects, or when there is documented research establishing the effectiveness of such actions.
- Using integrated pest management techniques to minimize the establishment of non-native invasive species within the burned area. When there is an existing approved management plan that addresses non-native invasive species, emergency stabilization treatments may be used to stabilize the invasive species.

Monitoring

- Monitoring of treatments and activities for up to three years from date of fire containment.

Burned Area Rehabilitation

Rehabilitation is defined as "Efforts undertaken within three years of containment of a wildland fire to repair or improve fire-damaged lands unlikely to recover naturally to management approved conditions, or to repair or replace minor facilities damaged by fire." (620 DM 3.3M)

The objectives of rehabilitation are: 1) To evaluate actual and potential long-term post-fire impacts to critical cultural and natural resources and identify those areas unlikely to recover naturally from severe wildland fire damage; 2) To develop and implement cost-effective plans to emulate historical or pre-fire ecosystem structure, function, diversity, and dynamics consistent with approved land management plans, or if that is infeasible, then to restore or establish a healthy, stable ecosystem in which native species are well represented; and 3) To repair or replace minor facilities damaged by wildland fire. (620 DM 3.4B)

The protection priorities of rehabilitation are: 1) To repair or improve lands damaged directly by a wildland fire; and 2) To rehabilitate or establish healthy, stable ecosystems in the burned area. (620 DM 3.8A)

Allowable rehabilitation actions are limited to the following items, grouped by issue topic:

Lands Unlikely to Recover Naturally

- Repair or improve lands unlikely to recover naturally from wildland fire damage by emulating historical or pre-fire ecosystem structure, function, diversity, and dynamics consistent with existing land management plans.

Weed Treatments

- Chemical, manual, and mechanical removal of invasive species, and planting of native and non-native species, restore or establish a healthy, stable ecosystem even if this ecosystem cannot fully emulate historical or pre-fire conditions.

Tree Planting

- Tree planting to reestablish burned habitat, reestablish native tree species lost in fire, prevent establishment of invasive plants.

Repair/Replace Fire Damage to Minor Facilities

- Repair or replace fire damage to minor operating facilities (e.g., fences, campgrounds, interpretive signs and exhibits, shade shelters, wildlife guzzlers, etc.) Rehabilitation may not include the planning or replacement of major infrastructure, such as visitor centers, residential structures, administration offices, work centers and similar facilities. Rehabilitation does not include the construction of new facilities that did not exist before the fire, except for temporary and minor facilities necessary to implement burned area rehabilitation efforts.

Monitoring

- Monitoring of treatments and activities for up to three years from date of fire containment.

C. Safety

Employee and public safety is the first priority in every fire management activity. All ES&R activities must reflect this commitment. Employees involved in ES&R work are responsible for knowing, understanding, and practicing safe operations. Prior to control of the fire, ES&R assessment activities must be closely coordinated with fire management activities to avoid conflicts. During that time, all assessment efforts must conform to National Wildfire Coordinating Group (NWCG) safety, training, qualifications (NWCG-PMS 310-1, Wildland Fire Qualifications), Interagency Standards for Fire and Fire Aviation Operations, and incident business management standards. Burned area assessments can only be conducted in areas within the perimeter of an “uncontrolled” fire where suppression activities have been successfully

completed and fireline hazards mitigated. Also see physical requirements for fireline access, in Fireline Handbook (NFES 0065/PMS 410-1).

A risk assessment must be prepared for pertinent ES&R activities.

II. Planning Process

A. Overview of Planning and Funding Process

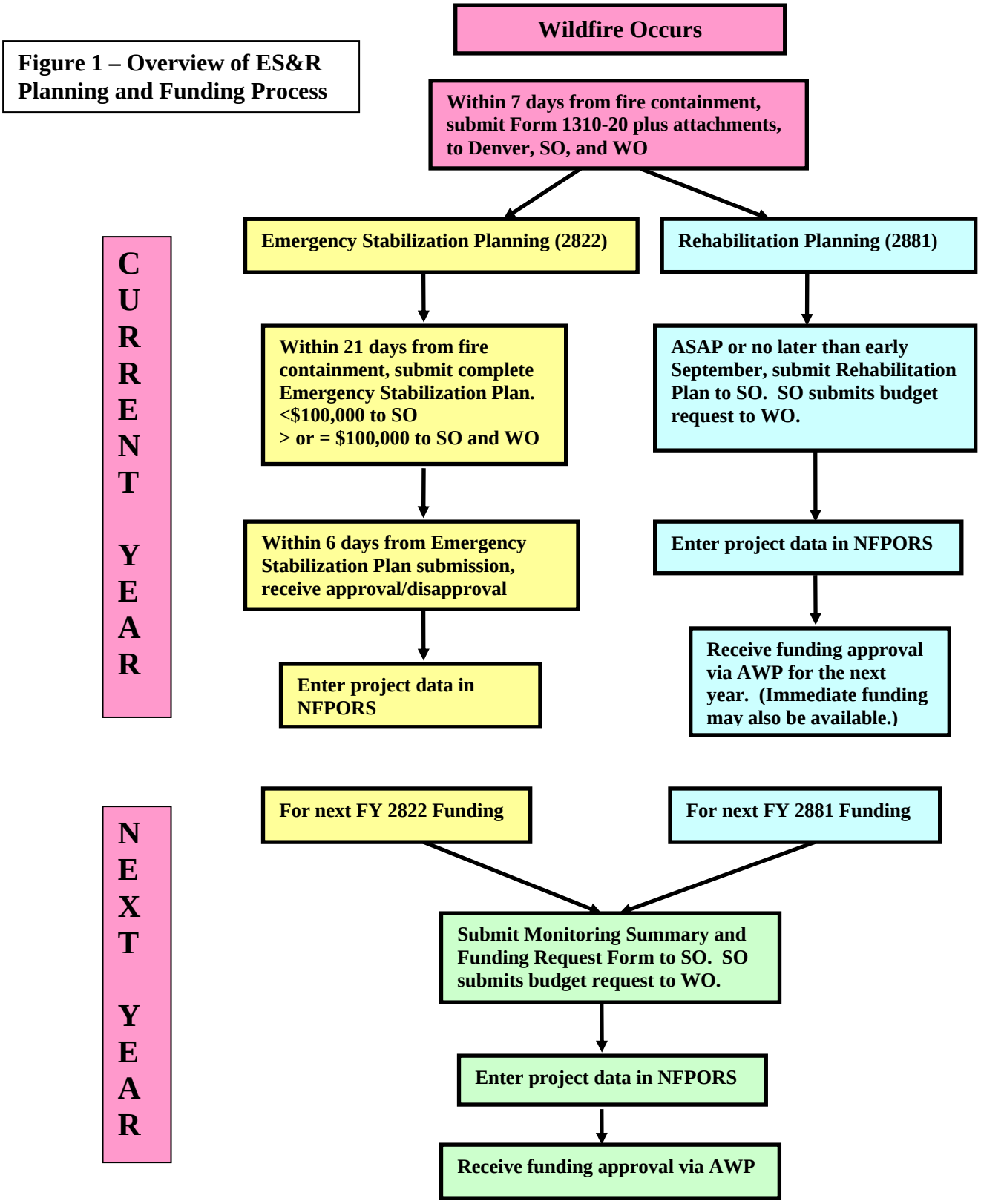
Policy changes in 2004 separated ES&R into two programs with separate planning and funding processes. Emergency stabilization and rehabilitation activities are developed in separate plans and are funded through separate processes. Figure 1 illustrates an Overview of the ES&R Planning and Funding Process.

Emergency Stabilization (ES) Plans are prepared immediately following a wildfire when stabilization activities are determined to be needed. Efficiencies are gained by preparing the Burned Area Rehabilitation (BAR) Plans concurrently with the ES Plan. Funding of rehabilitation treatments usually occurs in the following fiscal year, but may be authorized sooner if funding is available.

The emergency stabilization subactivity (2822) is funded through the Wildland Fire Operations Account. ES Plans for $100,000 or more are approved at the Washington Office administrative level, while funding for plans less than $100,000 may be approved by the State Director.

The burned area rehabilitation subactivity (2881) is funded through the Other Fire Operations Account, Burned Area Rehabilitation. Funded is on a priority basis as established by the Interior Burned Area Emergency Rehabilitation (IBAER) Working Group in consultation with the Office of Wildland Fire Coordination. Priority selection for treatments identified in BAR Plans on prior-year fires occurs shortly after the start of the fiscal year, but may be funded sooner depending upon the availability of funds.

Figure 1 – Overview of ES&R Planning and Funding Process



The five types of plans used in the ES&R program are shown in Figure 2. These plans must be consistent with the Land Use Plans (LUPs); e.g., Resource Management Plans (RMPs) or Management Framework Plans (MFPs), as well as any applicable activity level plans i.e., Wilderness Plans, Area of Critical Environmental Concern Plans, Fire Management Plans, etc. Development of ES&R plan objectives is guided by resource management objectives, general management practices, and constraints identified in the appropriate LUP. Land use plan objectives may not be immediately accomplished by implementing ES&R treatments after a wildfire; however, ES&R treatments should facilitate the process toward meeting LUP objectives.

Figure 2 – Types of ES&R Program Plans

PLAN	PURPOSE
Initial ES Plan (Form 1310-20, plus attachment)	To provide an initial overview of the fire and anticipated treatments, and to assign the project number to the subactivities.
Programmatic ES&R Plan (PESRP)	A programmatic plan with NEPA documentation, prepared in advance, clearly defining normal types of wildfire incidents and typical ES&R treatments for a given planning area.
Emergency Stabilization Plan (ES Plan)	A site-specific plan that specifies treatments required to implement post-fire emergency stabilization activities within one year of containment of the wildfire.
Burned Area Rehabilitation Plan (BAR Plan)	A site-specific plan that specifies treatments required to implement post-fire rehabilitation activities within three years of containment of the wildfire.
Burned Area Emergency Response Plan (BAER Plan)	A plan that involves multiple agency ownership or on large complex wildfires where preparation of a plan is beyond the capability of the local staff and values-at-risk are extremely high, often prepared by an activated DOI BAER team.

Understanding the planning and budget processes is essential in managing an effective ES&R program. Conducting pre-planning to anticipate the upcoming fire season and resulting ES&R needs is critical for the timely receipt of funding and the prompt implementation of treatments. In an office where ES&R is a frequent activity it may be advisable to hold a pre-season meeting to address issues and review the plan preparation process. The ES&R program must coordinate closely with the renewable resources staff in the office, such as rangeland management specialists and wildlife biologists, to insure that any potential plans or proposals do not conflict with other programs or plans. Appendix 1 shows a checklist of the principle steps of ES&R pre-planning, planning, implementation, and monitoring phases.

Policies on timeframes for ES&R planning, funding, and implementation are very specific. ES&R treatments must be implemented, to the extent possible, before additional damage occurs to the burned area, immediately down slope of the burned area, or before undesirable vegetation becomes established. Treatments must be implemented at a time that will ensure a high or maximum probability of success. The **initial** ES Plan (Form 1310-20 plus attachments) must be submitted to the State Office, the Washington Office, and Denver Budget Office **within seven calendar days** of wildfire containment. At that time the Denver Budget Office allocates two

work months for the writing of the ES Plan. Both 2822 and 2881 may be indicated on Form 1310-20, though funding under 2881 may not occur until the following fiscal year. The **complete** ES Plan must be submitted **within 21 calendar days** to the State ES&R Program Lead (for Plans below $100,000) or to the State ES&R Program Lead and the National ES&R Program Lead (for Plans of $100,000 and above). In rare circumstances, the approving office may grant an additional 14 day extension for the completion of the ES Plan. Review and approval at the appropriate administrative level (SO if below $100,000; WO if $100,000 or above) must be completed **within six calendar days** of receiving the ES Plan. If a plan is not approved or changes are required, the initiating office has 10 working days to make the requested changes and the approval office has 5 working days to either approve or disapprove the revised plan. The ES&R Program timeframes in relation to tasks are shown in Figure 3.

Figure 3 – ES&R Program Timeframes

Event	Timeframe	Task
Wildfire occurs	Immediately	Manager assigns a Resource Advisor from the local office to the fire. Notify State Office ES&R Program Lead of the scope of the fire and the anticipated fire containment date.
Initial ES Plan needed. Submit Form 1310-20 plus supplemental attachments (Both 2822 and 2881 may be indicated on Form, though funding under 2881 may not occur until the following fiscal year.)	Within 7 days of fire containment	Concurrently to State ES&R Program Lead, National ES&R Program Lead, and Denver Budget Office (BC-612).
Complete ES Plan needed. Prepare/Submit complete ES Plan.	Within 21 days of fire containment	<$100,000 submit to State ES&R Program Lead. > or = $100,000 submit to State ES&R Program Lead (for review) and concurrently to National ES&R Program Lead.
Receive approval/disapproval of ES Plan	Within 6 working days of receipt by Approval Office	Requesting Office receives memo approving funding, or need for revision on a plan by plan basis. State Director or acting has funding approval authority for plans < $100,000. Bureau Budget Officer, after concurrence with Assistant Director WO-200 or their designee, has funding approval authority for plans > or = $100,000.
Receive notification of ES funding approval	Immediately	ES&R Project Lead enters project data into NFPORS
BAR Plan needed. Prepare/Submit BAR Plan	Timely, ideally soon after submitting ES Plan but no later than Sept 5 annually	To State ES&R Program Lead and National ES&R Program Lead. Field Office ES&R Project Lead enters project data into NFPORS.
Receive approval/disapproval of BAR Plan funding.	Before October 31 annually	Funding for BAR Plans is approved via the Annual Work Plan.
Accomplishment Report and Funding Request Form for next FY 2822 and 2881 funds	Early September	To State ES&R Program Lead for review and submission to National ES&R Program Lead for concurrence. Funding for years 2 and 3 is approved via the Annual Work Plan.
Close-out Report	Early September of 3rd year	To State ES&R Program Lead for review and submission to National ES&R Program Lead.

B. Relationship of the ES&R Program to Fire Management Plans

The Fire Management Plan (FMP) identifies and integrates wildland fire management and related activities within the context of the approved LUPs and defines a program to manage wildland fires (wildfire, prescribed fire, and wildland fire use). The FMP is supplemented by operational plans, including but not limited to preparedness plans, preplanned dispatch plans, prescribed fire burn plans, and prevention plans. Fire Management Plans assure that wildland fire management goals and components are coordinated.

The "Rehabilitation and Restoration" section of the FMP summarizes the fire planning unit's ES&R program and the longer term goals of restoration which may provide guidance beyond the three year period applicable to ES&R. It should describe the historic annual workload necessary to plan and implement the program. The ES&R section should include a discussion on collaborative processes in planning, priority setting, and implementation. Any unit-wide plan, such as a Programmatic Fire ES&R Plan (PESRP), developed to guide ES&R activities should be included in the appendix of the FMP.

The ES&R program must coordinate closely with the fire program and participate in the preparation and review of FMPs to insure identification, documentation, and integration of common goals and objectives.

C. Types of Plans

1. Programmatic ES&R Plan (PESRP)

The PESRP is a programmatic ES&R plan, with an associated Environmental Assessment (EA) or Environmental Impact Statement (EIS), which is developed at the landscape level prior to wildfire occurrence. See Appendix 2 for a sample PESRP outline. The PESRP contains a description of ES&R treatments that would be implemented under normal conditions in the event of a wildfire and documentation of the potential treatment impacts. A PESRP should be prepared on a landscape basis at the District or Field Office level by an interdisciplinary team with public input. By addressing techniques and species that may be used, the process of developing the site specific plans will be made considerably easier. Because the PESRP is analyzed through the NEPA process, procedures for public review and comment will also apply, thus insuring ample opportunity has been given to those that are interested to be involved in the process of developing the plan. The decision to prepare a PESRP is based on the size and diversity of the ecosystems involved, fire history (wildfire occurrence and size), resource values, and values-at-risk. State Directors may require that PESRPs be prepared for all or part of the public lands within their jurisdiction and have approval authority for PESRPs that cannot be delegated.

The PESRP contains information about those areas where wildfires are most likely to occur, where and what type of ES&R treatments could be used, and a NEPA document disclosing the potential impacts of those proposed ES&R treatments. Review of previous ES&R Plans and monitoring data from previous efforts is essential during PESRP development. A map showing

previous 10-year wildfire occurrence by fire size should be prepared to assist in determining if a PESRP is warranted for an administrative unit. A review of fire management activity plans and wildfire reports for the unit under study may also assist in the analysis process. The PESRP reduces the repetitive preparation of individual NEPA documents for ES&R treatments following wildfires, thereby reducing time and costs, especially where wildfire occurrence is typically high. A PESRP assists in the timely and cost-effective implementation of ES&R treatments. A PESRP anticipates typical post-fire conditions and is used to develop site-specific ES&R plans.

After a wildfire occurs, an ES Plan and/or a BAR Plan are prepared by an interdisciplinary team to mitigate the adverse affects of wildfire on public lands. The ES Plan and BAR Plan are separate plans with distinct treatments and activities and describe the site-specific ES&R actions to be taken.

The ES Plan and BAR Plans, when based on information in the PESRP, may document NEPA compliance by completing a Documentation of National Environmental Policy Act Adequacy (DNA). See current BLM guidance for preparing the DNA worksheet. Since site-specific ES&R treatments and areas have not been identified in the PESRP NEPA document, there is a need to ensure consistency with the analysis at the site-specific project level. Site-specific ES&R treatments would be addressed using the DNA review process. This internal review process allows the BLM to base site-specific proposed actions on previous NEPA documents. A decision record is written based on the existing PESRP NEPA document if the proposed action has been adequately covered, and there are no changed circumstances. If the site-specific proposed action meets these criteria, the DNA worksheet documents the NEPA adequacy of the programmatic PESRP. A discovery of a new circumstance may require the development of a new EA or EIS if the circumstances are outside the scope of the PESRP analysis.

Existing PESRPs should be reviewed annually for consistency with most recent guidance, policy, and regulations. (Earlier versions of the PESRP were called Normal Year Fire Plans – NYRPs or NFRPs, etc.).

2. Emergency Stabilization Plans (ES Plans)

In accordance with Department policy, **initial** ES Plans must be submitted within seven days of wildfire containment. To meet this requirement, submit Form 1310-20 (use current BLM template) adding the additional information requested to the State Office, the Washington Office, and the National Business Center in Denver **within seven calendar days** of wildfire containment. When the National Business Center receives this form, they will assign two work months to the project number for use with the ES&R subactivities for the writing of the ES and BAR Plans. Both 2822 and 2881 may be indicated on Form 1310-20, though funding under 2881 may not occur until the following fiscal year.

The **complete** ES Plan, using the current BLM template, must be submitted **within 21 calendar days** to the State ES&R Program Lead (for Plans below $100,000) or to the State ES&R Program Lead and the National ES&R Program Lead (for Plans of $100,000 and above).

Complete ES Plans are site-specific documents that specify treatments required to implement post-fire emergency stabilization treatments. At a minimum, ES Plans must address:

a) A description of each treatment or activity.

b) A discussion demonstrating how the specifications are consistent and compatible with approved LUPs, and how the proposed treatments and activities are related to damage or changes caused by the wildfire (why it is being recommended), and the goals and objectives of the ES Plan.

c) An explanation of how a treatment or activity is reasonable and cost effective relative to the severity of the burn.

d) A monitoring plan which contains provisions for monitoring and evaluation of treatments and activities (including criteria for measuring a successful treatment or activity), techniques, and a procedure for collecting, archiving, and disseminating results. The monitoring plan must have clearly stated and measurable goals and objectives.

e) Clear delineation of funding and responsibilities for implementation, operation, maintenance, monitoring, and evaluation throughout the entire life of the project, and criteria for determining failure of a treatment or activity.

f) Clear, concise, and measurable (measurable quantitatively, qualitatively, and with a time frame) objectives based on the LUP goals and objectives.

Emergency stabilization treatments must be designed to address the protection priorities of: 1) Human Life and Safety, and 2) Property and unique biological resources (designated Critical Habitat for Federal and State listed, proposed or candidate threatened and endangered species) and significant heritage sites (620 DM 3.7A).

An ES Plan may be amended at any time as long as the treatment implementation can be accomplished within one year from the fire containment date.

Emergency Stabilization Objectives
Each treatment description in ES Plans must include stated objectives to be met through implementation and how the treatment relates to damage or changes caused by the fire. All treatment objectives must be **SMART**:

1. **S**pecific yet understandable.
2. **M**easurable with appropriate monitoring protocols.
3. **A**ttainable relative to site potential.
4. **R**easonable given social-economic constraints.
5. **T**imeframe to accomplish.

Examples of objectives that meet these criteria include:

Example of seeding establishment objective:

- *Establish densities (on ten random 1m2 plots): 1) Seeded grasses of 5 plants/m2, 2) Seeded forbs of 1 plant/m2, and 3) Seeded sagebrush of ½ plant/m2 by the end of the second full growing season following seeding.*

Example of cover objective to minimize soil erosion:

- *Obtain total cover values of between 70-80% of adjacent unburned land on the same ecological site by the end of the second full growing season following the fire. Total cover is comprised of plant canopy, litter, standing dead, biological crust, and rock/gravel as determined by point cover sampling.*

Example of invasive treatment objective:

- *Prevent cheatgrass from exceeding pre-burn or adjacent unburned densities of 100 plants/m2 by the end of the second growing season.*
- *Spotted knapweed density is no more than 10 plants per acre by the end of the third growing season.*

Example of riparian stabilization objective:

- *Livestock closure will remain in effect until 80% of the willow resprouts are 6 foot or taller in height and herbaceous species are within 20% of the canopy cover of unburned riparian values on the same stream.*

The objectives must relate to the stabilization priorities to be protected or achieved.

3. Burned Area Rehabilitation Plans (BAR Plans)

Burned Area Rehabilitation Plans (using the current BLM template) are site-specific documents that identify non-emergency treatments and activities to be carried out within three years following containment of a wildfire. Burned area rehabilitation funding (2881) is limited and therefore treatments are prioritized based upon a set of criteria developed by IBAER. All BAR Plans must be approved by the National Program Office. At a minimum, BAR Plans must address:

a) A description of each treatment or activity

b) A discussion demonstrating how the specifications are consistent and compatible with approved LUPs, and how the proposed treatments and activities are related to damage or changes caused by the wildfire (why it is being recommended), and the goals and objectives of the BAR Plan.

c) Provisions for monitoring and evaluation of treatments (including criteria for measuring a successful treatment) and techniques, and a procedure for collecting, archiving, and disseminating results (if monitoring is not covered completely under the ES Plan).

d) Clear delineation of funding and responsibilities for implementation, operation, maintenance, monitoring, and evaluation throughout the entire life of the project, including rehabilitation actions and follow-up actions beyond three years that may be necessary to ensure the effectiveness of initial investments, although funding for such activities beyond three years will not be funded from the ES&R accounts.

Rehabilitation treatments must be designed to address the protection priorities: 1) To repair or improve lands damaged directly by a wildland fire; and 2) To rehabilitate or establish healthy, stable ecosystems in the burned area. (620 DM 3.8A)

A BAR Plan may be amended at any time as long as the treatment implementation can be accomplished within three years from the fire containment date.

Rehabilitation Objectives
Each treatment description in BAR Plans must include stated objectives to be met through implementation and how the treatment relates to damage or changes caused by the fire. All treatment objectives must be **SMART**:

1. **S**pecific yet understandable.
2. **M**easurable with appropriate monitoring protocols.
3. **A**ttainable relative to site potential.
4. **R**easonable given social-economic constraints.
5. **T**imeframe to accomplish.

Examples of objectives that meet these criteria include:

Example of restoring healthy stable ecosystem objective:

- *Establish seeded native grass densities of 5 plants m^2 by the end of the third growing season on the key area in the Loamy 10-13" Precipitation Zone, Wyoming big sagebrush/bluebunch wheatgrass ecological site.*
- *Seed production on 90% of the perennial native grass and forb plants, and 70% of the bitterbrush plants that were burned relative to seed production on adjacent unburned rangeland on the same ecological site is achieved prior to reintroduction of livestock to the burned area.*
- *Establish minimum of 20 shrub plants per acre within three years of containment date of the fire.*

Example of invasive species objective:

- *Cheatgrass density is not more than 100 plants m^2 and spotted knapweed density is no more than 10 plants per acre by the end of the third growing season.*

Example of minor facilities objective:

- *Repair of internal allotment fences will be accomplished in a manner that does not impact the newly seeded burned area and completed prior to livestock turnout.*
- *Replacement of picnic tables in recreation area will be accomplished in a manner that provides for public safety and protection of the seeded areas.*

The objectives should include the vegetation attribute (density, cover, frequency, production, etc.) that one desires to obtain and measure. An adjacent unburned area may be used as the reference for setting the standard for attainment of an objective as long as it is on the same ecological site as the treatment monitoring plot. This approach provides for setting a realistic objective that takes into consideration climatic influences on the treatment area in comparison to the non-treated area.

4. Burned Area Emergency Response Plans (BAER Plans)

BAER Plans are generally developed by the DOI National Burned Area Emergency Response (BAER) Teams. BAER Teams, comprised of personnel from the Bureau of Indian Affairs, Bureau of Land Management, National Park Service, Fish and Wildlife Service, and Forest Service, may be dispatched to any DOI wildfire incident or where other federal lands are involved. This approach is generally employed for a wildfire that involves multiple agency ownership or on large complex wildfires where preparation of ES&R planning is beyond the capability of the local staff and where the values-at-risk are extremely high. A team of interagency specialists (members may be outside the local office area) is brought in to assess the impacts of the fire and prepare a BAER Plan for emergency stabilization treatments. A BAER team must be requested through the Incident Command System (ICS) prior to wildfire control or later through the appropriate line management decision process (see National Interagency Mobilization Guide Chapter 60, Section 69.4 at http://www.nifc.gov/news/mobguide/index.html). Prior to requesting a DOI BAER Team, the National BAER Team Dispatch Prioritization Criteria must be reviewed, and mutually agreed upon with the National and State ES&R Program Leads. See Appendix 3 National BAER Team Dispatch Prioritization Criteria. The BAER Plan developed is usually an ES Plan that may recommend rehabilitation treatments.

In activating the BAER Teams, all disciplines and programs at the requesting office need to be represented and be part of the plan development process and some members of the local staff may need to be present through the whole plan development process. A high quality plan is only possible with the significant and timely input of the local staff. If they cannot be involved, the integrity, utility, and quality of the final product may be compromised. In the request for the BAER Team, it may also be advisable to call in BLM personnel who are familiar with BLM processes and needs relative to the ES&R program to assist the BAER Team. They may also be able to assist in data entry and financial management of the ES project plan and implementation.

In planning for, or requesting a BAER Team, it may be beneficial for the BAER Team leader to report to the host office a couple of days before the rest of the team. The time can be used to

discuss the Delegation of Authority, details or issues to be addressed in the proposed plan, and the information needed to insure the highest efficiency possible for the plan development. The Delegation of Authority is the authorizing document that details the issues to be addressed by the BAER Team. It should be understood, developed and agreed to before the Team arrives. It is the "contract" that the team should be using in their analysis and plan development. Managers need to be aware that the more complex and defining that their Delegation of Authority is, likely the more costly and difficult the plan will be to implement. A "General Delegation of Authority", while potentially less troublesome to accept, may leave the requesting office with a plan that does not meet its needs.

Prior to bringing in the BAER Team, the requesting office should have the following information available:

- GIS layered information including soil and vegetation community types, allotment boundaries, rangeland improvement information, grazing permittee information, T & E information, and if possible land use plan or activity plan information in an electronic format. If the information isn't available external to the BLM firewall, it should be made available with CDs. It should be understood that GIS issues can be problematic, and as a result cost valuable time. If an incident is so large or complex so as to warrant the use of a BAER Team, a BLM GIS person may also be needed to insure that the data is compatible and useable to the BAER Team. There may also be difficulties if the fire crosses administrative or state boundaries, hence the need for GIS skills that may extend beyond the ordinary skills in the use of GIS data bases.

- Contact information for interest groups, persons or others that can assist in plan development or who maybe beneficial to be involved. Examples include local Audubon Society members, Division of Wildlife subject matter experts, and US Fish and Wildlife Service personnel who may need to be involved with T & E species questions. The local BLM personnel may also be involved in contacting these resources, who may then be involved in plan development.

When the BAER Team develops an ES Plan, part of the plan should address continued financial management of the plan through implementation. The continued financial management of the plan may necessitate the hiring or detailing of an Implementation Team Lead or Program Analyst or Financial Analyst.

III. Standards for Use of Emergency Stabilization and Rehabilitation Funds

ES&R funds will only be expended on lands administered by the BLM and are not authorized for use on private, state or other ownership lands. An exception is when the Wyden Amendment may apply. See Wyden Amendment Section for detailed guidance. Standards for the appropriate use of ES&R funding for administrative actions and treatment guidance are discussed below. Also see Appendix 4 - Expenditure Guidance for ES&R Funds.

A. Administrative Actions

1. Acquisitions

Acquisition planning must closely work with the local procurement personnel to determine if the staffing to accomplish the anticipated acquisitions is available, or whether additional personnel is needed to assist with the acquisitions necessary to support the implementation work. The acquisition group can help the implementation team decide how acquisitions should be accomplished (utilization of End-Product type contracts or equipment rentals) and what lead times may be necessary to accomplish the procurements. The implementation team needs to work closely with the procurement personnel to insure adequate specifications and product descriptions are addressed.

When obtaining competition, price must always be considered, but other factors may also be considered such as past performance, experience, quality, etc. The Acquisition Regulations which apply to ES&R projects are the same regulations which apply to procurements which support fire suppression activities. The following are some of the competition thresholds listed in the Federal Acquisition Regulations:

- Acquisitions under $2,500 – Do not need to obtain competition, but should do so if necessary to ensure receiving a reasonable price.
- Acquisitions $2,500 to $25,000 – Competition should be obtained to the maximum extent practicable. Normally, a minimum of three quotes should be obtained. The number of quotes obtained is dependent on the nature of the supplies and services being obtained. If competition is not obtained, a memo documenting the reasons must be placed in the file.
- Generally, all acquisitions over $25,000 must be advertised with full and open competition. There are a number of exceptions to these advertising requirements. The authority used during fires is the following:
    - FAR 5.202 (a)(2) – The proposed contract action is made under the conditions described in 6.302-2 (or, for purchases conducted using simplified acquisition procedures. If unusual and compelling urgency precludes competition to the maximum extent practicable) and the Government would be seriously injured if the agency complies with the time periods specified in 5.203;
    - FAR6.302-2 – Unusual and compelling urgency.
        (a) Authority.
            (1) Citations: 10 U.S.C. 2304 (c)(2) or 41 U.S.C. 253(c)(2).
            (2) When the agency's need for the supplies or services is of such an unusual and compelling urgency that the Government would be seriously injured unless the agency is permitted to limit the number of sources from

which it solicits bids or proposals, full and open competition need not be provided for.

(b) Application. This authority applies in those situations where -

(1) An unusual and compelling urgency precludes full and open competition; and

(2) Delay in award of a contract would result in serious injury, financial or other, to the Government.

(c) Limitations.

(1) Contracts awarded using this authority shall be supported by the written justifications and approvals described in 6.303 and 6.304. These justifications may be made and approved after contract award when preparation and approval prior to award would unreasonably delay the acquisition.

(2) This statutory authority requires that agencies shall request offers from as many potential sources as is practicable under the circumstances.

Justifications are required whenever the minimum competition required is not obtained. If preparation of the justification would unreasonably delay the acquisition, the justifications may be prepared and approved after contract award. It is the responsibility of technical and requirements personnel to provide, and certify as accurate and complete, necessary data to support their recommendations for other than full and open competition. Specific information required for justifications may be obtained in Part 6.303-2 of the Federal Acquisition Regulations through the units contracting officer.

End-Product Contracts: FAR 16.202-1 – "A firm fixed-price contact provides for a price that is not subject to any adjustment on the basis of the contractor's cost experience in performing the contract. This contract type places upon the contractor maximum risk and full responsibility. It provides maximum incentive for the contractor to control costs and perform effectively and imposes a minimum administrative burden upon the contracting parties."

The specifications in a job contract are written to state the work to be accomplished and the level of acceptability. As a minimum, the potential contractors must be given enough information to prepare a bid and perform the work under the contract without further directions. This places the risk of completing work on the contractor and provides them the most financial incentive to work efficiently.

2. Acquisitions of Services

The National Fire Plan website www.blm.gov/natacq/FIRE/vendors.html lists the current national contracts in place for suppression equipment/services available, which can also be a source for ES&R projects. Transportation charges for shipping or receiving equipment are an appropriate use of ES&R funds. Government vehicles or equipment damaged during the course of completing an ES&R treatment may be repaired using ES&R funds.

3. Awards

Exceptional efforts by employees, realization of large cost savings, and improvement of methodologies or techniques may be justification to provide an employee or group of employees

an award. Only burned area rehabilitation funds (2881) may be used for performance awards (the use of Emergency Stabilization funds (2822) is prohibited). Performance awards may be monetary or time off. All awards must follow existing awards policy and have the concurrence of the National ES&R Program Lead in writing.

4. Contracting

Contracting for ES&R treatments, personnel, services, supplies, and materials shall follow all BLM contracting regulations. In some instances, contracting and purchasing procedures found in the Incident Business Management Handbook (NWCG Handbook 2, PMS902) may be used. Chapter 20 of the NWCG Handbook gives guidance for suppression related acquisitions. The National Fire Plan (NFP) has a goal of contracting 50 percent of NFP project funds. Opportunities for stewardship contracting should also be considered.

The fuels reduction indefinite delivery indefinite quantity (IDIQ) contracts have been set up to streamline contracting for fuels reduction and ES&R projects. A program overview, vendors, and statement of work can be viewed at: http://www.blm.gov/natacq/FIRE/contracting.html

5. Equipment/Facilities Rental

Rental of equipment needed to implement ES&R activities is an appropriate use of ES&R funds. The use of Emergency Equipment Rental Agreements (EERAs), as outlined in the Interagency Incident Business Handbook, may be appropriate when there is a threat to life and/or property. When there is ample time to compete for contract, competitive sourcing is the best method to rent equipment. EERAs are designed for "quick" hire for immediate emergency use and should not circumvent normal acquisition methods when time allows.

Short-term rental/leasing of space is an appropriate use of ES&R funds. Space rental may include a warehouse for seed, straw bales, straw wattles, or a portable unit such as a refrigerated trailer. The item to be rented must be identified with supporting rationale in the ES&R Plans. Justification must be in writing and shall include why a rental is needed, at lease three competing sources (plus dates they were contacted), and a cost analysis.

All renting/leasing must follow agency policies.

6. Equipment Purchases

Equipment purchases needed to accomplish ES&R treatments may be made using ES&R funds following the guidelines below. All purchases of equipment must follow agency procurement policies and be approved by the National ES&R Program Lead in writing (except for minor supplies such as flagging, offices materials, etc.). Equipment must be entered into the appropriate tracking and property management system and equipment that requires licensing to operate must be accounted for under the Fixed Assets guidelines.

BLM Sensitive Equipment has an acquisition cost of $500 - $4,999.99 per single item and includes both Information Technology (IT) equipment and property such as cameras, small GPS units, seed bag sewing machines, hand held seeders, fencing equipment, etc. These are items that have been selected by BLM as sensitive because they are portable, desirable and/or need special handling.

Sensitive Equipment has an acquisition cost of $5,000 – $14,999.99 per single item and is either IT equipment or property that has been designated as sensitive because it is portable, desirable and/or needs special handling. Examples of this category of equipment include truck-mounted seeders, seed mixing equipment, trailers, harrows, generators, automated post pounders, RAWS, etc.

Capitalized Equipment has an acquisition cost of $15,000 or greater per single item and would include rangeland drills and other heavy equipment.

Equipment purchases must be identified with supporting rationale in the ES&R Plans and have a line manager's recommendation before being forwarded to the National ES&R Program Lead for approval. The rationale for recommending the purchase must include: 1) why purchasing is more cost effective than leasing; 2) names and numbers of at least three competing sources (plus dates they were contacted); 3) where the equipment will be stored after use on the project; 4) and a line manager's signature. The purchases shall remain the property of the ES&R program for the life of the equipment.

The purchase of computers, cell phones, and radios using ES&R funds is prohibited except in support of a National, Regional, or Statewide ES&R Program or a BAER Team and must be approved in writing by the National ES&R Program Lead. These purchases must follow all Bureau IT and procurement policies.

Efforts should be made to utilize all equipment across multiple incidents (and future incidents) and with other BLM offices, including radio cache equipment from the BLM National Office of Fire and Aviation at the National Interagency Fire Center (NIFC). A pool of fixed assets (comprised of sensitive and capitalized equipment, as defined above) will be available for use by all BLM offices.

7. Evaluation of Different Techniques and Methodologies

The evaluation of different techniques and methodologies (equipment, plant materials, etc.) on a limited scale may be supported with ES&R funding if the potential to improve cost efficiency or success of ES&R treatments is likely. If the different technique or methodology is proposed from an outside source, the use of ES&R funds is limited to providing an appropriate area within a burn and monitoring the results. ES&R funds would not be appropriate to fund associated NEPA documentation or treatment implementation when proposed by an outside source. If the different technique or methodology is from an internal source, use of ES&R funds may be appropriate for NEPA, implementation, and monitoring.

Caution must be used when incorporating different techniques or methodology to a project to ensure the goals and objectives of the overall project are not compromised. All activities under this section must be approved in writing by the National ES&R Program Lead.

Results of all evaluations require a technology transfer product upon completion of the evaluation. The product may be in the form of technical notes or bulletins for distribution through the agencies, professional papers, presentations, or other products. These products

should describe the problem, solution, methods or techniques, and should be distributed to a variety of audiences, including the public where feasible. The BLM's National Science and Technology Center is one a venue for publishing Technical Notes or Resource Notes.

Research projects are funded through the Joint Fire Science Program. Also see Research Section.

8. Fire Trespass

For all human-caused fires, where the suspect is identified, trespass actions may be taken to recover costs of suppression and ES&R treatments. Guidance on recovering costs of human-caused fires is found in BLM Manual H-9238-1-Fire Trespass and is initiated and tracked by the Fire Suppression and Law Enforcement organizations. For incidents where cost recovery of ES&R costs is proposed, extra care should be made to accurately document all ES&R expenditures.

9. Full Force and Effect Decision Authority

Given the emergency nature of stabilization treatments, it may be necessary to issue a decision to implement the treatments immediately or on a date specified in the decision document. A decision implementing treatments immediately may be issued in Full Force and Effect (FFE) using 43 CFR 4190.1 for rangelands and 43 CFR 5003.1 for forest lands. Also see Section IV E. Documenting Decisions section and the Livestock Grazing section for decisions on allotment closures.

In two recent cases (IBLA 2004-149/IBLA 2004-173 May 25, 2004 and IBLA 2004-228 June 16, 2004), IBLA has reaffirmed that "wildfire management decisions" are appealed directly to the Board rather than being subject to other protest and appeal procedures.

BLM decision makers may exercise Full Force and Effect (FFE) decision authority on appropriate wildfire management decisions. Field Offices must make reasonable efforts to discuss all wildfire management decisions with interested parties, partners, stake holders and State, local, and Tribal governments during the project planning and National Environmental Policy Act (NEPA) analysis stages of any project. A fire management decision placed in full force and effect does not eliminate the appeal period. Efforts must be taken to provide the opportunity for public comment during the planning phase of all wildfire management projects.

The authority for closing an area to livestock grazing is found at 43CFR 4110.3-3(b). If the determination is made **not** to place a livestock decision in full force and effect under 43 CFR 4160.3(f), **and** an appeal and request for stay of the grazing modification decision has been filed - - **do not** begin the treatment(s) until after the expiration of the period allowed under 43 CFR 4.21(b)(4) for the Office of Hearings and Appeals (OHA) to consider and rule on the stay request. If OHA stays the grazing portion of the decision, then the treatment(s) should be delayed until after the appeal process has been completed in order to avoid adverse grazing impacts to the treatment(s). Also see section below on Potential Protests, Appeals, and Stays.

Use of the FFE authority is discretionary. When BLM determines that immediate implementation of an ES&R decision is necessary because resources are at immediate risk of

erosion or other damage due to wildfire, BLM may make the decision effective immediately, or on a date established in the decision. Sections 43 CFR 4190.1 (rangelands) and 43 CFR 5003.1 (forested lands/woodlands) provides the authority for setting a date other than the date the decision is signed. When the FFE decision authority is used, the decision document must include information clearly identifying what resources are "at immediate risk of erosion or other damage due to wildfire" and what factors are placing those resources at risk (i.e. why is this an "emergency").

Decisions Affecting Other Authorized Uses: Implementation of a wildfire management decision may affect other uses authorized on public lands such as special recreation permits, grazing permits, rights-of-ways, wild horses or burros, or any number of permits/leases or authorized uses on public lands. It is imperative that the effects of a wildfire management decision be discussed and coordinated with other affected program specialists. A single wildfire management decision may be issued that applies to all uses potentially affected by it (a "multiple-use decision document"). For example, BLM relies on authority at 43 CFR 4110.3-3(b) and 4160.3(f) to issue and implement, in full force and effect, a decision that makes immediate modifications to use authorized by a grazing permit or that closes all or portions of an allotment to grazing use. Under the new wildfire management decision authority, when implementation of a wildfire management decision will affect grazing use, a single multiple-use FFE decision document may be issued that addresses emergency stabilization and rehabilitation treatments under 43 CFR 4190.1 for rangelands and 43 CFR 5003.1 for forested lands/woodlands and that closes all or portions of grazing allotment(s) under 43 CFR 4110.3-3(b).

The decision must explain the rationale for the decision, cite all of the appropriate authorities (e.g. 43 CFR 4110.3-3 (b) and 43 CFR 4160.3(f) for allotment closure and 43 CFR 4190.1 and/or 43 CFR 5003.1 for post-fire management/treatment decisions) and contain the appropriate appeal language applicable to each type of action. For example, a single decision that simultaneously addresses wildfire management/treatment and grazing authorization is appealable under 43 CFR 4160.4 for the grazing portion and 43 CFR 4.416 for the wildfire management portion.

Timing of Actions for FFE Decisions That Affect Grazing Use: If livestock removal or modification of grazing use is important to the success of a ES&R treatment and a determination is made to implement the treatment immediately and the decision is placed in full force and effect (using 4190.1 or 5003.1), then the livestock grazing modification should also be placed in FFE also using 4110.3- 3(b). Both components of the decision must clearly document what resources are at "substantial risk of wildfire" or "at immediate risk of erosion or other damage due to wildfire" and what factors are placing those resources at risk.

Potential Protests, Appeals, and Stays: A wildfire management decision issued under FFE using 43 CFR 4190.1 or 43 CFR 5003.1 must include information regarding appeal and stay procedures (see Supporting Language below). Information on adjudicating appeals regarding wildfire management decisions on either rangelands or forested lands/woodlands is contained in 43 CFR 4.410.

Both 43 CFR 4190.1 and 43 CFR 5003.1 override the automatic stay provisions contained in 43 CFR 4.21(a)(1) and the requirement to delay implementation until the appeal period has expired or a petition for stay has been adjudicated under 4.21(a)(2). A full force and effect wildfire management decision under 4190.1 or 5003.1 becomes effective the day the decision is signed or on a date stated in the decision. Regardless of whether or not an appeal is received, work may begin immediately or on a day specified in the decision. Work may continue until such time as a stay is granted by IBLA. Although work may begin immediately, the Board still retains the authority to issue a stay.

Supporting Language: When issuing an ES&R decision under FFE authorities, the following language must be included in the decision document:

> This wildfire management decision is issued under **[chose either 43 CFR 4190.1 for rangelands or 43 CFR Part 5003.1 for forested lands/woodlands, or both when applicable]** and is effective immediately **[or insert another date established in the decision]**. The BLM has made the determination that vegetation, soil, or other resources on the public lands are at immediate risk of erosion or other damage due to wildfire. Thus, notwithstanding the provisions of 43 CFR 4.21(a)(1), filing a notice of appeal under 43 CFR Part 4 does not automatically suspend the effect of the decision. Appeal of this decision may be made to the Interior Board of Land Appeals in accordance with 43 CFR 4.410. The Interior Board of Land Appeals must decide an appeal of this decision within 60 days after all pleadings have been filed, and within 180 days after the appeal was filed as contained in 43 CFR 4.416.

For a FFE wildfire management decision that also includes a FFE grazing decision, the decision document must cite (in a separate paragraph) the applicable grazing authority and appeal language/process, e.g. 4110.3-3(b) and 4160.3(f).

Referenced Sections from 43 CFR 4190.1 and 43 CFR 5003.1

> **4190.1 Effect of wildfire management decisions.**
> (a). Notwithstanding the provisions of 43 CFR 4.21(a)(1), when the BLM determines that vegetation, soil, or other resources on the public lands are at substantial risk of wildfire due to drought, fuels buildup, or other reasons, or at immediate risk of erosion or other damage due to wildfire, BLM may make a rangeland wildfire management decision effective immediately or on a date established in the decision.
>
> Wildfire management includes but is not limited to:
> (1). Fuel reduction or fuel treatment such as prescribed burns and mechanical, chemical, and biological thinning methods (with or without removal of thinned materials); and
> (2). Projects to stabilize and rehabilitate lands affected by wildfire.
> (b). The Interior Board of Land Appeals will issue a decision on the merits of an appeal of a wildfire management decision under paragraph (a) of this section within the time limits prescribed in 43 CFR 4.416.

5003.1 Effect of decisions; general.
(a). Filing a notice of appeal under part 4 of this title does not automatically suspend the effect of a decision governing or relating to forest management as described under sections 5003.2 and 5003.3.
(b). Notwithstanding the provisions of 43 CFR 4.21(a)(1), when BLM determines that vegetation, soil, or other resources on the public lands are at substantial risk of wildfire due to drought, fuels buildup, or other reasons, or at immediate risk of erosion or other damage due to wildfire, BLM may make a wildfire management decision made under this part and parts 5400 through 5510 of this chapter effective immediately or on a date established in the decision. Wildfire management includes but is not limited to:
(1). Fuel reduction or fuel treatment such as prescribed burns and mechanical, chemical, and biological thinning methods (with or without removal of thinned materials) and;
(2). Projects to stabilize and rehabilitate lands affected by wildfire.
(c). The Interior Board of Land Appeals will issue a decision on the merits of an appeal of a wildfire management decision under paragraph (b) of this section within the time limits prescribed in 43 CFR 4.416.

10. Funding: Requesting Additional or Turning Back Excess

Under the ES&R Plans, funding is requested and approved on a project-by-project, treatment-by-treatment basis. Funding can only be spent as requested and approved in the ES Plan and/or BAR Plan. Any requests for additional funding must be based on the results of monitoring and approved through an amendment to the original plan by the appropriate approving office. Occasionally a project will have excess funding due to reasons such as reduced seed costs, all or part of a planned treatment was determined unnecessary, or other similar savings. When approved funds are determined unnecessary for the project, the excess funding must be promptly identified and returned to the National ES&R Program Lead for redistribution.

11. Hiring ES&R Personnel

For current hiring guidance, consult the Interagency Incident Business Management Handbook (NWCG Handbook 2, PMS902) and local personnel specialists.

12. Maps and GIS

All ES&R treatments should be mapped with GPS and stored in an appropriate GIS database. Maps included in all ES&R plans must contain land status, treatment locations clearly identified (include existing fences that proposed protective fences will tie into), and be geo-referenced. They should contain sufficient metadata to inform potential users of how the data was gathered and will be at a large enough scale that details are easily interpreted during the review process. GIS generated colored maps are recommended.

13. Minimum Fire Size

All plans must be cost effective and document values-at-risk. Though there is no minimum size fire required in order to receive funding for ES&R treatments, any fire under 40 acres must document particularly compelling values-at-risk to gain funding approval.

14. National Drill Shop

The BLM operates a National Drill Shop in Vale, Oregon. The Drill Shop houses and maintains several types of rangeland drills used for planting seed. These drills are of varying capability and vintage. The Drill Shop should be contacted to determine equipment availability and specifications before ordering. The Drill Shop also maintains an inventory of other equipment that is useful in applying treatments. Procedures for ordering these drills and current use fees can be obtained from the Drill Shop. Transportation and operational (FOR) costs should be calculated and included as costs in the ES&R Plans. All drills must be cleaned prior to return to the drill shop to prevent the transportation of unwanted seeds, weeds, or pathogens.

15. National Seed Warehouse

The National Seed Warehouse is located at the Boise District Office in Boise, Idaho. A wide variety of native and introduced seed is purchased, tested, and stored at this facility. This facility purchases and stores seed for several States as described in a formal agreement (Memorandum of Understanding) with the Idaho State Director. The amount of seed each MOU State (Idaho, Oregon, Nevada, Utah, and Colorado) can reserve should be based on a reasonable projection of the annual acreage to be stabilized/rehabilitated over a 5-year period and the storage capacity of the warehouse.

Seed reserved through the Memorandum of Understanding (MOU) is held until September 1 each year for the requesting State and is available by requisition until this date. After September 1, any part of a State's reserved seed that has not been obligated with a requisition is available for any other State/District use. States or Districts that do not have MOUs with the Idaho State Director can acquire seed not reserved by another State at any time by submitting a requisition to the National Seed Coordinator. The use of the National Seed Warehouse is not mandatory. Seed may be purchased locally if it is more practical or desirable to do so. However, all seed testing and noxious weed restrictions still apply. All seed purchased by the National Seed Warehouse is tested for purity, germination, and applicable State-listed noxious and other weeds.

Also see Seed Selection, Testing, Treatments, and Purchasing sections.

16. Preexisting Conditions

ES&R funds cannot be used to settle long-standing disputes or completely deal with preexisting conditions. As examples:

- A riparian area is totally dominated by salt cedar. A fire burns through the area and funds are requested to stabilize and rehabilitate the area. While it is appropriate to deal with the potential spread of salt cedar as a result of the fire, and to replant herbaceous and woody vegetation to stabilize/rehabilitate the area with more desirable vegetation - - it is not appropriate to use ES&R funds to completely remove all of the salt cedar that were there before the fire.
- The burned area was in a poor pre-fire condition infested by 30 percent cheatgrass. It is appropriate to stabilize soils and inhibit increased expansion of invasive species (cheatgrass) by seeding with perennial species using ES&R funds, but it would not be appropriate to expend ES&R funds to reach a post-stabilization/rehabilitation objective of less than the 30 percent that existed before the fire.

17. Qualifications

There are no specific BLM qualifications for employees to participate in ES&R activities after the wildfire has been declared out. However, prior to the fire being declared out, all ES&R personnel must meet the minimum NWCG standards outlined in the Fireline Handbook (NFES 0065/PMS 410-1) as directed by the Incident Commander. Typically, during the active fire period, ES&R specialists are ordered using the THSP 310-1 Technical Specialist with light duty requirements.

18. Research

Formal research investigations of treatment effectiveness and fire ecology issues are defined as individual projects and cannot be funded by ES&R. All research activities should be presented to the Joint Fire Science Program, or other sources, for consideration and funding.

19. Timeliness

Congress has determined that "it is in the best interest of the Nation to take swift action to rehabilitate burned lands." Therefore ES&R treatments must be implemented, to the extent possible, before additional damage occurs to the burned area, immediately down slope of the burned area, or before undesirable vegetation becomes established. Treatments must be implemented at a time that will ensure a high or maximum probability of success. The **initial** ES Plan (Form 1310-20 plus attachments) must be submitted to the State Office, the Washington Office, and Denver Budget Office **within seven calendar days** of wildfire containment. At that time the Denver Budget Office allocates two work months for the writing of the ES Plan. Both 2822 and 2881 may be indicated on Form 1310-20, though funding under 2881 may not occur until the following fiscal year.

The **complete** ES Plan must be submitted **within 21 calendar days** to the State ES&R Program Lead (for Plans below $100,000) or to the State ES&R Program Lead and the National ES&R Program Lead (for Plans of $100,000 and above). In rare circumstances an additional 14 days may be granted for the completion of the ES Plan by the Approving Office. Review and approval at the appropriate administrative level (SO if below $100,000; WO if above $100,000) must be completed **within six calendar days** of receiving the ES Plan. If a plan is not approved or changes are required, the initiating office has 10 working days to make the requested changes and the approval office has 5 working days to either approve or disapprove the revised plan. If the plan is not submitted in a timely manner and without documented extenuating circumstances, there is a diminished likelihood for funding.

20. Travel and Training

Funding for travel and training must be tied to specific ES&R projects unless otherwise designated in the Annual Work Plan. Examples of appropriate uses of ES&R funds for travel and training include: sending personnel to ES&R related training courses [i.e., Project Inspector, Contracting Officer's Representative (COR), Seed COR, Pesticide Use Applicators, and Burned Area Emergency Response (BAER) Training], or travel costs to attend seed buys or lessons learned meetings.

21. Values-at-Risk (Values to be Protected)
While conducting the burned area assessment, values-at-risk must be documented and analyzed. High values-at-risk would include situations such as: homes at the bottom of a drainage; a community's only source of potable water; or a stream with T&E fish. The expenditure of ES&R funding must be commensurate with the values-at-risk. The primary questions to ask when determining values-at-risk are: Is the site at risk of further degradation? What can be done to prevent further degradation?

22. Work Schedule (overtime and base 8 hours)
Given the emergency or urgent nature of the ES&R program, it may be necessary to work long hours, work on weekends and holidays, and travel to remote locations via helicopter. At all times, BLM policy on hours worked, travel requirements, and safety considerations shall be followed.

Overtime may be authorized when deemed necessary by a supervisor. True overtime (code 113) can only be earned by ES&R personnel working on an ES Plan (essentially doing assessments in the field on an active fire) for up to 10 days after control of the fire or until the initial ES Plan is submitted for approval - - whichever is shorter. The Interagency Incident Business Management Handbook (IIBMH) states:

- 12.11 (2) Those involved in the preparation and approval of a Burned Area Emergency Stabilization and Rehabilitation Plan (ESR) whose overtime hours worked are exempt from coverage under the FLSA. The new overtime provision will apply only until the initial ES Plan is submitted for approval.
- 12.11 (4) In order to qualify for the pay provision, an employee's overtime work must be charged to a wildland fire, ESR, severity, or wildland fire suppression funds tied to the support of suppression operations and the overtime must be recorded on a timesheet approved by the appropriate supervisor or time keeper.

- Hazard: Guidelines for hazard/environmental pay differential is covered in the IIBMH:
  - Section 12.9: GS employees and 12.10 for Prevailing Rate Employees.
  - Section 12.9-3: Criteria for Entitlement to Hazardous Pay Differential for Irregular and Intermittent Hazardous Duties list 4 categories for hazard pay: 1) fire fighting, 2) limited controlled flights, 3) groundwork beneath hovering helicopter, and 4) work in rough and remote terrain. Burned area rehabilitation [Burned Area Emergency Response] (BAER Team) or other rehabilitation work does not meet the definition of firefighting for hazard pay eligibility; however, hazard pay under 2, 3, or 4 from above may apply in very limited circumstances. Line Officer determination and documentation is necessary to authorize hazard pay.

Work/rest guidelines outlined in the Interagency Business Management Handbook shall be followed. National Incident Operations Driving Standards shall also be followed.

The decision was made by the Wildland Fire Leadership Council (WFLC) in January 2003 not to shift base 8 preparedness salary costs to suppression accounts. Employees funded with fire

preparedness funds (i.e., 2810) will continue to charge their regular base 8 hours to the fire preparedness program when they are assigned to an emergency stabilization project, along with the incident number (i.e., 2810-JS-XXXX for stabilization). Overtime, premium pay, etc., will be charged to the emergency stabilization program (i.e., 2822-JS-XXXX). When working on a burned area rehabilitation projects, employees funded with fire preparedness funds (i.e., 2810) will charge their regular base 8 hours, and any overtime or premium pay to the burned area rehabilitation program (i.e., 2881-JL-XXXX).

Employees funded with fuels program funds (i.e., 2823 or 2824) will charge their regular base 8 hours, and any overtime or premium pay to the emergency stabilization program (i.e., 2822-JS-XXXX) when they are assigned to an emergency stabilization project; or the burned area rehabilitation program (i.e., 2881-JL-XXXX) when they are working on rehabilitation projects.

Employees funded with ES&R funds (i.e., 2822 or 2881) will charge their regular base hours and any overtime or premium pay to the fire suppression program (i.e., 2821-HU-XXXX) when they are assigned to a wildfire suppression incident. Employees funded with non-fire program funds (i*.e., MLR, O&C, etc.)* will charge their regular base 8 hours and any overtime or premium pay to the fire suppression program (i.e., 2821-HU-XXXX) when they are assigned to a wildfire suppression incident (including initial attack); to the stabilization program (i.e., 2822-JS-XXXX) when they are assigned to an emergency stabilization project; or the burned area rehabilitation program (2881-JL-XXXX) when they are working on rehabilitation projects.

B: Treatment Guidance

All ES&R treatments (fences, culverts, water bars, etc.) must comply with applicable BLM policy and standards (as specified in the Engineering Guide Specifications and Standard Drawings, and Manual Section 9170) and other applicable guidance. Treatments should be designed to be cost-effective, commensurate with the values-at-risk, and to meet stabilization/rehabilitation objectives.

1. Cadastral Survey

Emergency stabilization or rehabilitation funds may be used to mark treatment area boundaries between agency and private, or agency/agency administered lands. These funds may also be used to locate and flag existing monuments such as section, quarter, and property corners for avoidance prior to any surface disturbing activity that could result in damage to or destruction of the monuments. If an existing monument is removed or destroyed by a surface disturbing activity associated with ES&R treatments, a Chief Cadastral Surveyor (located in most BLM State Offices) will be notified. ES&R funds may then be used to reestablish the marker. ES&R funds will not be used to resolve long-standing large-scale ownership issues or replace monuments removed or destroyed by the fire or by fire suppression activities.

2. Clean Water Act

Certain ES&R treatments are regulated under the Clean Water Act. A Nationwide Permit Summary 33 CFR Part 330 (January 15, 2002) (NWP 37, Emergency Watershed Protection and Rehabilitation) (http://www.spa.usace.army.mil/reg/NATIONWIDES-NEW/NW37-Wshed.pdf) describes actions that must be taken prior to implementing certain treatments. The placement of

sediment control structures may have impacts to aquatic resources and thus require authorization under Sections 401 and 404 of the Clean Water Act. Activities, such as the installation of straw check-dams, rock dams, culverts, and other measures intended to stabilize ground cover and slow the rate of soil erosion in perennial and intermittent stream channels and other waters of the U.S., including wetlands, require written notification to the local Corps of Engineers District Office. Locations of these types of treatments should be included in the written notification. The District Engineer has 30 days from date of receipt of the BLM's proposal to request additional information. The Corps of Engineers may require modifications to ES&R treatments to ensure that the environmental impacts to stream channels or wetlands are minimal. If adverse impacts of the proposed activities are more than minimal, the Corps should notify the applicant that an individual permit is required. Examples of certain ES&R activities that may require Section 404 authorization include placing rocks in an active stream channel to create a check dam.

3. Closures

Closures may be established under the authorities at 43 CFR 8364 for public safety or to temporarily close the burned or seeded areas to uses (livestock, recreation, etc.) or access (motorized, non-motorized, horse, foot, etc.) to allow recovery and prevent unacceptable resource damage. Such closures require following the appropriate NEPA process, issuing a Federal Register Notice, and sufficient public notices. Costs to enforce public restrictions or closures should be accomplished within existing program funding, except in extraordinary situations which require justification and approval within the ES&R Plan. Also see the Recreation, Law Enforcement, and Livestock Management sections.

4. Contour Log Felling

Contour log felling consists of falling burned trees or importing small diameter logs and anchoring them perpendicular to the slope to slow down erosion. For specifications, see references from the following NRCS Colorado Fact Sheets:
http://www.co.nrcs.usda.gov/technical/eng/CONTOURFELLINGfactsheet.pdf, and
http://lamar.colostate.edu/~rmoench/logfell.pdf

It is imperative that when using contour log felling that the specifications be followed as closely as possible. If not followed, these structures may cause more harm than good. Contour log felling is an acceptable ES&R practice and can be funded using ES&R funding. Also see Log Erosion Barriers section.

5. Cultural Resources

Emergency stabilization objectives related to cultural resources are: 1) to stabilize and prevent post-fire related degradation to cultural resources including archaeological sites, cultural landscapes, traditional cultural properties and historic structures, and 2) to ensure other ES&R treatments comply with Section 106 of the National Historic Preservation Act (NHPA). In the first case, where fire-related damage may contribute to further degradation of cultural resources, ES&R funds may be used as follows: a) to determine if known (see "Identifying resources at risk" below) resources are at risk from such degradation; b) to determine if stabilization is possible and cost-effective for such resource; and c) to implement stabilization treatments. ES&R funds are limited to stabilizing resources, therefore it is not appropriate to use ES&R funds to conduct extensive or systematic post-fire inventories; site documentation; national

register evaluations; assessments of damage caused by the fire; or site restoration. It is also not appropriate to use ES&R funds to repair damage caused by wildfire suppression activity.

ES&R treatments are subject to the provisions of Section 106 of the National Historic Preservation Act. Where activities have the potential to affect historic properties, ES&R funds may be spent for Section 106 compliance.

Emergency Stabilization Treatments

The purpose of emergency site stabilization and protection actions is to ensure that critical cultural resources will be available in the future for normal management activities. Emergency stabilization actions are directed at resources that are in danger of further degradation due to the effects of a wildfire. Successful stabilization preserves the value of cultural resources for future management activities, such as scientific research or interpretation. ES&R of cultural resources after a fire is not itself a Section 106 activity and does not follow that process.

In relation to cultural resources, emergency stabilization funds may be used to:

- Determine which cultural resources are at risk from post-fire degradation due to erosion, looting, or other effects;
- Assess those resources to determine if stabilization is possible and cost-effective to prevent further degradation;
- Implement stabilization actions to prevent further damage;
- Implement Section 106 compliance for other ES&R activities where appropriate.

Procedures

- Identifying resources at risk: The limits of time and funding preclude Class III inventory procedures as a standard approach to site identification for purposes of site stabilization and protection. Endangered sites may be identified by other means including: examination of existing site databases and historic/documentary information; aerial survey (photographs, fly-over of burnt area); consultation (e.g. SHPO, Tribes, and others); existing cultural resource planning models; and classifications in land use and fire management plans.
- Evaluating the risk: Emergency stabilization actions must be commensurate with the values-at-risk. A standard measure of such values includes those aspects of a site that make it eligible for the National Register. However, emergency stabilization funding does not cover routine National Register evaluations; therefore it is permissible to assume a cultural resource has such values for stabilization/protection purposes when necessary. On rare occasions it may be more cost-effective to evaluate the values of a site than to make this assumption. These instances need to be justified on a case-by-case basis.
- Stabilization: Stabilization actions are those which prevent or minimize further damage to sites due to the effects of a fire. Stabilization methods do not include data recovery except in extremely rare occasions where recovery of information is the only possible or least costly alternative to preventing further damage from fire effects. Such considerations may be the case for exfoliating rock art panels, for example, where there is no feasible way to stabilize the degradation. These instances need to be justified and approved on a case-by-case basis.
- Implementation: Cultural resource specialists should work closely with other specialists to coordinate stabilization assessments and treatments. Treatments may include, for example, hazard tree removal; erosion prevention; and patrolling, area closures, and camouflaging

where sites are at risk from looting. Where looting is a concern there should also be a determination with regard to the cost effectiveness of law enforcement patrols versus the other protection measures such as road closures, public awareness contacts, or use of site stewards.

Burned Area Rehabilitation Treatments

The cultural resources needs for a rehabilitation treatment follows the same guidelines as for emergency stabilization except that funding is for actions that may extend up to three years. Restoration of cultural resources to pre-fire condition (such as rebuilding log cabins or other structures) is not appropriate for rehabilitation funding (620 DM 3). Funding is limited to preventing further post-fire degradation to cultural resources due to erosion, looting, other fire effects, or for Section 106 compliance for other proposed rehabilitation treatments.

National Historic Preservation Act Compliance

Emergency stabilization and rehabilitation actions are subject to the provisions of Section 106 of the National Historic Preservation Act (NHPA). Compliance with Section 106 is part of any treatment that has the potential to affect historic properties, and is required for all such undertakings. ES&R funding covers compliance with the NHPA for treatments.

Cultural resource specialists should be involved early in ES&R treatment planning, in order to facilitate compliance with Section 106 and to minimize delays for anticipated ES&R projects.

When necessary, cultural resource specialists also assist ES&R teams to comply with other cultural resource laws and regulations, such as the Archaeological Resources Protection Act and the Native American Graves Protection and Repatriation Act.

Fire Suppression Activities and Cultural Resources

"Funding for fire suppression activity damage repair actions will come from the Wildland Fire Operations, Emergency Suppression subactivity and will be charged to the project code for the wildland fire suppression effort that resulted in the damage. Fire suppression activity damage repair will not be charged to the Emergency Stabilization or Rehabilitation subactivity accounts" (620 DM 3.10B).

6. Culverts, Rolling Dips

Culverts may be installed along roadways on public lands (or removed) using ES&R funds if it is determined by an engineer or hydrologist that the existing culvert might not be large enough to handle the predicted amount of runoff from the burned area. In areas where culverts are not needed or may not sustain peak flows, rolling dips may be installed/constructed in roadways following BLM specifications. All culverts in areas possessing native fish species must facilitate fish passage.

7. Early Warning Flood/Evacuation System

Remote Automated Weather Stations (RAWS) or other satellite driven systems may be necessary to monitor rainfall amounts and intensity in moderate to high intensity burns in immediate proximity to high values-at-risk (highways, structures, etc.). The initial installation and maintenance can be funded using ES&R funds for 3 years following containment of the fire.

Continued operation and maintenance after that time must be funded from other sources. Prior to purchase of these systems, check the availability of such equipment at the Branch of Remote Sensing/Fire Weather Support (FA-262) at the BLM National Office of Fire and Aviation at the National Interagency Fire Center (NIFC). Any hardware that is purchased as a result of these activities should be cached for reuse on future ES&R incidents. The monitoring of these Early Warning Systems (EWS), and the subsequent public notifications, must be coordinated with appropriate local emergency management agencies after instillation. The local emergency action agency is responsible for public evacuation planning, public notification, and evacuation on non-federal lands. A Cooperative Agreement must be prepared for this coordinated effort.

8. Facilities (repair and replacement)

The repair or replacement of minor improvements and facilities [e.g., kiosks, fences, exclosures, small water pipelines, interpretive or boundary signs, recreation facilities (tables, outhouses, etc.), water control structures, corrals, guzzlers, trails, etc.] burned or damaged by fire to pre-fire specifications is authorized with the use of ES&R funds only if these improvements or facilities are addressed in an appropriate planning document or if they are an approved BLM project [with a Range Improvement Project System (RIPS) or FIMMS project number]. Facility repair or replacement associated with public health, safety, or resource protection is addressed in the ES Plan while minor facility repair or reconstruction is addressed in the BAR Plan.

It is not appropriate to upgrade facilities to higher standards than existed before the fire (e.g., increasing a wildlife guzzler from 20,000 gallon capacity to a 40,000 gallon capacity or a restroom from a one-hole fiberglass facility to a two-hole SST) or to construct new facilities that did not exist before the fire. However, the difference of the cost of an upgrade (above the cost of replacing the original facility) may be paid for with another funding source. In areas of moderate or high fire frequency, metal posts/pipe posts or metal panels/gates may be substituted for older wooden fences during post-fire repair. Maintenance of repaired or reconstructed improvements beyond three years from containment of the fire is funded by other sources, not ES&R funds.

Replacement or repair of major facilities (e.g., visitor centers, residential structures, administration offices, work centers, vehicle bridges, or similar facilities and their contents) is not an appropriate use of ES&R funds.

9. Facility Inspection/Structural Stabilization and Clean-up

A visual inspection for hazardous conditions/materials and structural integrity of government owned structures affected by fire is required prior to the structure being reopened or made accessible to the public. Inspections are conducted for structural integrity by a qualified engineer assigned to the interdisciplinary ES&R team or project. A written condition assessment (including hazardous materials - HAZMAT) of each affected structure is submitted as part of the approved ES&R Plan. Should this assessment occur following demobilization and the closure of the fire suppression accounts, it may be funded through the ES&R account. ES&R funds are not to be used to develop reconstruction or repair plans or to initiate or complete any of the work outlined in these documents (including HAZMAT mitigation). For safety purposes, security measures required prohibiting public access to damaged structures or HAZMAT sites may be paid for using ES&R funds.

Facilities utilized by suppression forces should be cleaned/repaired using the fire suppression account and may include such activities as carpet cleaning, painting, etc. Facilities utilized by ES&R personnel should be cleaned/repaired using the ES&R account.

Also see Hazardous Materials Section.

10. Fences, Cattleguards, and Gates

Protective fences may be constructed using emergency stabilization funds to protect burned areas (from impacts by wildlife, domestic livestock, wild horses/burros, or humans and for the health and safety of agency personnel and the public) during the recovery period for burned vegetation or the establishment period for new seedings. Fencing may serve as either temporary protection only or as a permanent management fence if a seeding or recovered area requires separate management to maintain the investment. Fences should be placed around the perimeter of the burn to the minimum degree required, considering topography, rock outcrops, soils, existing fences, etc. When not needed for long-term management, protection fences should be reused on new ES&R projects after the protection period is over (if feasible). Prior to proposing any new fences, an analysis of the existing fences must be completed to see if they can meet the identified need.

Fences are generally installed:

- To protect a new ES&R seeding from grazing during the establishment period and to manage the seeded area after it is established to maintain the seeded species.
- Where it is determined that the native vegetation will adequately recover if protected from grazing, and the area does not require further treatments to reestablish plant species, composition, or cover.

New fencing that exceeds the amount required to protect new seedings or the burned area will be funded by another benefiting subactivity. Constructing new fences on private/public land boundaries to keep privately owned livestock off adjacent burned or rehabilitated public lands is the responsibility of the private land owner(s). Therefore, ES&R funds are not to be used to construct new fences on the private/public land boundary unless state laws (e.g., herd districts) require a different approach or under the conditions described in the following paragraph. Appropriate administrative and/or legal action should be taken when livestock trespass on public lands closed for stabilization or rehabilitation purposes occurs and the private landowner is responsible for fence construction or maintenance.

Construction of fences on the boundary of or across private or state lands may be considered if: 1) the fence was originally constructed by the BLM and has a valid project number; 2) the fence meets the criteria found in the Wyden Amendment (see Wyden Amendment section); or 3) if it can be clearly shown that construction of this fence results in a cost savings to the government compared to fencing only on public lands. Situations where this exception might apply includes where a shorter fence can be constructed by crossing private or state lands compared to building the fence on the private/state and public land boundary or where the topography is such (steeper or rockier on the public than the private) that it costs less to construct the fence on the private land. BLM must acquire an easement from the landowner prior to fence construction (including

cattleguard installation if required). The easement should be for 4-5 years in case additional livestock exclusion is required beyond the second growing season. Also see Livestock Management Post-Fire section. All fences constructed with ES&R funds must meet Bureau standards found in handbook H-1741-1 Fencing.

Cattleguards may be installed on maintained county, agency or State roads, and areas of high use where a gate would present a safety hazard to the public or would be impossible to keep closed. Cattleguards are not to be installed with ES&R funds on lightly traveled roads and two-track trails where a gate would suffice. A State or county permit must be obtained if required prior to installation. Warning signs concerning gates and cattleguards may also be installed with ES&R funds to reduce public safety concerns. A cattleguard installed in conjunction with a temporary protection fence must be removed and used on future ES&R projects.

Emergency stabilization funds can be used to maintain ES installed/funded fences, cattleguards, or gates for a period of up to three years.

Removal of protective fences and cattleguards can be funded with emergency stabilization funds within the three-year period following a wildfire. After 3 years, funding other than from ES&R will be required. If a temporary fence is to be reused on a new ES&R project, funding to remove the old fence and install it on the new ES&R project can be funded through the new ES&R project.

Existing BLM approved fences (documented with a project number in the Rangeland Improvement Project System) burned within the perimeter of the fire may be repaired or reconstructed using rehabilitation funding (considered as minor facilities). However, if the existing interior fence is to be used as the seeding protection fence (instead of constructing a new fence), then it can be repaired using emergency stabilization funds. In cases of threats to human safety, such as a highway protection fence having been burned, all efforts to coordinate with the owner of the fence are to be made as quickly as possible. If action cannot be taken in a timely manner, then emergency stabilization funds may be used to repair the fence for human safety purposes until it can be rebuilt.

ES&R funding may be used to remove old burned fencing that must be eliminated prior to drill seeding, fence replacement, or other mechanical treatment(s).

If it is more practical and economical to maintain (bring up to current BLM standards) an existing BLM approved fence a short distance from a proposed ES&R treatment rather than build a new temporary fence, then ES&R funds may be used to maintain the existing fence.

On a case by case basis, an ES&R protection fence that is at the end of the project life may be bartered as “excess property” to offset the cost of removing the fence.

Non-Standardized Fence Types Paid for by ES&R Funds

- EZ Panel – Temporary panels attached together with pipe clamps. Used for short stretches.

- Steel Post – Used in areas of high fire frequency.
- Electric Fence

All fences and cattleguards must be entered into the Rangeland Improvement Project System (RIPS) or its replacement system.

11. Forest Treatments
Seeding or planting of trees for emergency stabilization (willows or cottonwood poles along a creek) is only appropriate if such actions have been demonstrated to be cost-effective in meeting project objectives of stabilizing watersheds to prevent downstream damage and can be completed within one year.

Tree planting using rehabilitation funding is limited to the following [per Wildland Fire Leadership Council direction and Departmental Manual 620 DM 3 (3.8.M(3)] and must be consistent with existing approved LUPs and BLM guidance:

- Reestablish burned habitat.
- Reestablish native tree species lost in a fire.
- Prevent establishment of invasive plants.

The costs for cutting trees destroyed by fire where they are a danger to the public (hazard trees) as well as the use of trees for log erosion barriers to inhibit erosion is an appropriate use of ES&R funds. Also see Contour Felling and Hazard Tree Removal sections.

Although the initial burned area assessment of forest resource loss may be funded by emergency stabilization funds, a detailed timber salvage assessment and the costs associated with a salvage sale (i.e., timber inventory, contract preparation, etc.) or the sale itself cannot be charged to the ES&R accounts.

12. Fuels Management/Greenstrips
Post-fire fuels management activities designed to address a fuels issue, not for site stabilization or to protect ES&R treatments, are not an appropriate use of ES&R funds.

13. Hazardous Materials
A visual inspection for hazardous conditions/materials and structural integrity of facilities affected by wildfire is required prior to their being reopened or made accessible to the public. Appropriate inspections are conducted by a qualified technical specialist. A written condition assessment (including hazardous materials - HAZMAT) of each affected structure is submitted as part of the approved ES&R Plan. ES&R funds may only be used to identify the location of hazardous materials and to prevent them from leaving the site (aerial seeding, hydromulching, or trenches down slope) or for safety measures required to keep the public from entering the site (signs, barriers, and road closures). ES&R funds are not to be used to develop reconstruction or repair plans, or to initiate or complete any of the work outlined in the hazmat assessment document. ES&R funds may NOT be used for hazardous material removal or mitigation.

Hazardous materials discovered during field assessments may be secured with emergency stabilization funds.

Also see the Preexisting Conditions section.

14. Hazard Tree Removal
The cost of cutting trees destroyed by fire (hazard trees) where they are a danger to the public (along roads, trails, campgrounds, and high use areas) is an appropriate use of ES&R funds. Also see Contour Felling and Forest Treatment sections.

15. Insect and Rodent Control
Outbreaks of rodents or insects may threaten seedings or returning native vegetation. ES&R funds may be used to protect seedings/returning vegetation from damage on a limited basis. After consultation with APHIS and state wildlife agencies, ES&R funds may be requested for rodent or insect control from the National ES&R Program Lead. Additionally, the time and costs of necessary NEPA, Pesticide Use Proposals, etc. will need to be considered in overall plan development.

16. Invasive Plant Control
ES&R funds can be used to control non-native invasive plants within burned areas when it can be documented that those plants may quickly invade or hamper reestablishment of native vegetation or adversely effect the establishment or maintenance of a seeding. Invasive plant control treatments must comply with existing approved LUPs and BLM guidance. Caution should be used when controlling invasive plants in the vicinity of T&E plants and animals, especially in Critical Habitat areas.

An integrated pest management approach should include using a combination of chemical, biological, mechanical, and/or hand control methods, as well as, post-fire weed assessment and monitoring. The cost to assess and control invasive species is an appropriate use of ES&R funds. Other funding for weed control must be acquired if treatments are needed after the three-year time limit for rehabilitation funding. All invasive species control methods must conform to specific BLM policy (BLM Manual MS-9000-1 and Handbook H-9011-1). Herbicide use must be approved and consistent with current policy and associated environmental analyses.

Chemical, biological, and mechanical treatments necessary to minimize invasive species in conjunction with site preparation for ES&R seedings is an appropriate use of ES&R funds. The use of herbicides to control post-fire invasive species is appropriate if:

- The herbicides proposed are approved for use on public lands. All other applicable label and environmental restrictions must be followed.

- The application of herbicides is necessary to keep non-native invasive plants from invading and dominating the post-fire environment.

- The application of herbicides is necessary for site preparation before seeding or planting. (Do not include forb, shrub or grass species in the seed mixture that are

susceptible to harm by herbicides if it is likely that weed control may be needed after the burned area seeding has germinated or is established.)

- The revegetation of grasses, forbs and shrubs to prevent the establishment or reestablishment of non-native invasive species is recommended after herbicide treatment.

A signed Pesticide Use Proposal (PUP) must be in place with the correct approval signature from the State Office before any herbicides may be applied. Appropriate NEPA documentation must be completed prior to the use of any herbicide on public lands. All labels must be followed and pesticides must be applied by a licensed applicator.

Washing vehicles and equipment to prevent the spread of invasive species or pathogens is an appropriate use of ES&R funds.

17. Law Enforcement

Typically, costs to enforce public restrictions or closures are accomplished within existing program funding. However, there may be extraordinary circumstances that require ES&R funding for law enforcement efforts. Funding of BLM law enforcement personnel is typically allocated by the benefiting subactivity. Based on values-at-risk, law enforcement personnel may be needed in unique situations, such as: to protect significant heritage sites from looting; to protect the public from safety hazards; and to enforce closures necessary for the recovery of burned or seeded areas. Use of ES&R funds for law enforcement efforts must be adequately described in the ES&R Plan with justification as to why the unique situation may warrant enforcement action. It may be appropriate and feasible to enlist the assistance of local law enforcement authorities or Fish and Game, Division of Wildlife personnel, etc. in addressing law enforcement needs. An example would be the additional patrols or extension of existing patrols in the burned area during hunting season.

Also see Closures and Recreation sections.

18. Livestock Management Post-Fire

It is critical to provide appropriate levels of rest or deferment from grazing after a wildfire to meet emergency stabilization and burned area rehabilitation goals and objectives. It is extremely important to allow resprouting vegetation to recover and newly seeded species to become firmly established. Levels and duration of rest or deferment must be consistent with short term emergency stabilization and rehabilitation objectives (such as stabilizing soils after wildfire to prevent erosion) as well as long term land use plan objectives. Monitoring results from previous stabilization and rehabilitation efforts should be reviewed to determine the results of previous rest/deferment prescriptions.

Policy: Livestock are to be excluded from burned areas until monitoring results, documented in writing, show emergency stabilization and rehabilitation objectives have been met. Objectives must be clearly defined in the Emergency Stabilization and/or Burned Area Rehabilitation Plan. Before livestock grazing can resume monitoring must

show that objectives have been met. In the case of treatment failure, other factors may need to be considered.

It often takes two years or longer to successfully establish a new seeding, especially when establishing native plants. During years of below normal precipitation or drought, longer rest periods from livestock grazing may be needed to meet ES&R goals and objectives. Alternatively, some ecosystems may need less rest from grazing while they recover from a fire. (For example, a high elevation area which receives > 16 inches of precipitation annually which was in good or excellent ecological condition before an early June fire.) Closures remaining in effect for longer than three years from fire containment fall outside of ES&R policy. After three years from the fire containment date, continued management of the burned areas falls under the local office's land use plan goals and objectives.

Before determining what actions to take and pursuant to 43 CFR 4110.3-3(b), BLM consults or makes a reasonable attempt to consult about ES&R treatment and management objectives, the potential need to close the treatment area to livestock grazing, and other potentially responsive management actions that may be needed to provide for meeting the objectives. At a minimum, this consultation occurs with affected livestock grazing operators, the interested public, and the State having lands or responsibility for managing resources within the area. If BLM decides that livestock grazing of the ES&R treatment area would impede progress towards achieving ES&R management objectives, then BLM issues a decision under 43 CFR 4160 to close to livestock grazing either all or part of the affected allotment and to otherwise specify management actions that BLM and/or the affected grazing operator(s) will implement to provide for objectives achievement. The regulations at 43 CFR 4110.3-3(b) provide authority for BLM to issue such decisions as immediately effective final decisions.

An immediately effective final decision is implemented as soon as it is issued and it remains in effect unless: (a) an appellant successfully obtains a stay of the decision from the Department of Interior, Office of Hearing and Appeals (OHA); or, (b) upon OHA denying an appellant's stay petition, the appellant successfully obtains an injunction of the decision from a federal civil court. Refer to BLM Handbook H-4160-1 for guidance regarding the formatting and content of grazing decisions as well as more information regarding the different implementation procedures that apply to a grazing decision that is first issued as a proposed decision as compared with a grazing decision that is issued as an immediately effective final decision.

Temporary fencing to exclude livestock grazing from seedings and resprouting vegetation may be necessary and should be evaluated to determine if fencing is necessary and the most cost effective alternative. A more cost effective method of vegetation protection to consider might be closing entire pastures or allotments in order to meet ES&R objectives. For example, if 75 percent or more of an allotment or pasture is burned, it may be more cost-effective to close the area rather than expend funds to install, maintain, and remove fences at a later date. ES&R funding can be used to repair existing fences to protect recovering vegetation and seedings and is preferred to construction of new fences.

The use of ES&R funds to pay livestock herders or to offset loss of forage to livestock permittees/lessees is prohibited. ES&R funds can be used for inspecting burned areas within

grazing allotments for compliance and should be identified in the ES&R plan. If livestock are found within closed areas, a Notice of Unauthorized Use and subsequent paperwork/actions should be issued in accordance with 43 CFR 4150.

Also see Standards for Rangeland Health and Guidelines for Grazing Management section.

19. Log Erosion Barriers
Log erosion barriers may be used to reduce soil erosion. These structures can be effective if properly installed (Robichaud, Peter R.; Beyers, Jan L.; Neary, Daniel G. 2000). Also see Contour Log Felling section.

20. Mulching
Mulch material may be spread across areas to reduce soil erosion. Any material used as mulch must be certified as weed and insect free in accordance with individual State's Department of Agriculture laws and requirements. Consideration should be given to utilizing biomass or wood chips off of BLM lands first before proposing to use other types of mulch. See Colorado NRCS Fact Sheets, at http://www.co.nrcs.usda.gov/technical/eng/STRAWMULCHfactsheet.pdf.

21. National Landscape Conservation System
When an ES&R effort is initiated on BLM's National Landscape Conservation Areas (NLCS) (National Conservation Areas, National Monuments, Wilderness, Wilderness Study Areas, Wild and Scenic Rivers, or Areas of Critical Environmental Concern, National Scenic and Historic Trails) the ES&R assessment team should coordinate their efforts with local and State NLCS personnel. If seeding or planting is necessary to prevent soil loss, control noxious weeds, or to restore habitat, etc., the use of native seed/plant species is strongly encouraged and may be required in some areas such as Wild and Scenic Rivers. Also see Wilderness Areas and Wilderness Study Areas sections.

22. Prescribed Fire
Emergency stabilization or rehabilitation funding is not appropriate following prescribed fire projects in which fire behavior was within prescription. Emergency stabilization or rehabilitation funding may only be used on that portion of a fire that has been declared a wildfire.

Minor facilities and structures such as fences or kiosks on BLM lands that are burned during the escape of the prescribed fire may be repaired using ES&R funds. The use of ES&R funds for the repair/replacement of major facilities and structures such as telephone poles, buildings, or homes burned on BLM, other agency, or private lands as a result of prescribed fire is prohibited.

23. Recreation
Burned or seeded areas may be temporarily closed to the public (43 CFR 8364) by excluding vehicle, bicycle, horse, and foot use if unacceptable resource damage would occur, or if danger to the public is present due to fire damage or ES&R activities. Such closures require following the appropriate NEPA process, issuing a Federal Register Notice, and sufficient public notices. Costs to enforce public restrictions or closures should be accomplished within existing program funding, except in extraordinary situations that require justification within the ES&R Plans and appropriate approvals. Also see Closures and Law Enforcement sections.

24. Revegetation

Natural recovery by native plant species is preferable to planting or seeding. The potential for recovery of existing vegetation and the potential establishment of invasive species should be evaluated prior to making a decision whether or not to seed a burned area.

Information on vegetation and soils can be found in several locations including the Great Basin Guidebook, BLM 2005, the NRCS Soil Surveys at: http://soils.usda.gov/survey/printed_surveys/, and ecological site potential (ecological site descriptions) at: http://trident.itc.nrcs.usda.gov/esis/index.html. References such as these should be reviewed to help determine what species should be in the mix to increase the likelihood of success. Climatic information should be reviewed for information on timing of growing season precipitation and annual precipitation patterns. The following are important sources of information for evaluating and planning vegetation treatments:

1. The Ecological Site Descriptions for your local area can be obtained either from the NRCS State Rangeland Management Specialist or on the web at: http://www.nrcs.usda.gov/technical/efotg/.

2. The Fire Effects Information System (FEIS) at http://www.fs.fed.us/database/feis/ one source of information on fire effects and recovery potential for many plants.

3. The NRCS-USGS Biological Resources Division "VegSpec" website (http://www.plants.usda.gov and click on "VegSpec" icon) is an expert system that aids technical specialists or managers in making sound decisions on what to plant on specific sites. VegSpec integrates the Natural Resources Conservation Service (NRCS) soils, plants, and climate databases to select adapted native and non-native plants to seed burned areas.

4. Guidebook to the Seeds of Native and Non-Native Grasses, Forbs and Shrubs of the Great Basin. Scott Lambert 2005. Bureau of Land Management, Idaho Technical Bulletin No. 2005-04.

5. The Plant Conservation Alliance (http://nps.gov/plants/), a consortium of ten federal government Member agencies and over 225 non-federal Cooperators, has many useful sources of information for evaluating and planning vegetation treatments, such as Seeds of Success (http://nps.gov/plants/sos/index.htm).

6. Species seeded or planted on burned areas must provide the protection required by ES&R Plan objectives, be consistent with the appropriate approved LUP and be in compliance with Executive Order 13112, Invasive Species, February 3, 1999. Post-seeding or planting management must maintain these species. According to BLM Manual 1745 Introduction, Transplant, Augmentation, and Reestablishment of Fish, Wildlife, and Plants, use of non-native seeds as part of a seeding mixture is appropriate only if:

   1) Suitable native species are not available; 2) the natural biological diversity of the proposed management area will not be diminished; 3) exotic and naturalized species can

be confined within the proposed management area; 4) analysis of ecological site inventory information indicates that a site will not support reestablishment of a species that historically was part of the natural environment; 5) resource management objectives cannot be met with native species.

Policy: The planting/seeding of shrubs for the purpose of vegetation or wildlife habitat recovery [except to prevent permanent impairment of designated Critical Habitat for Federal and State listed, proposed or candidate threatened and endangered species - 620 DM 3 -3.7.M(7)] is an appropriate use of 2881 funds. Shrub seeds or seedlings purchased for T&E species habitat stabilization or that can be demonstrated to be effective in stabilizing a burned area within 3-years (620 DM 3 - 3.7.E) is an appropriate use of 2822 funds and must be seeded/planted within one year from fire containment.

The Native/Non-native Worksheet documents the rationale for using non-native plants and lists the criteria for selecting native plants for revegetation. This worksheet is a required component for all ES&R Plans and is part of the plan template. In addition to the criteria listed in the Native/Non-native Worksheet, the use of local seed sources for native plants is recommended, especially the proper subspecies of plants like big sagebrush as long as the seed can be secured, purchased at a reasonable price, and planted in a reasonable amount of time. Important elements to consider in selecting a seed mixture that includes native plants include the following:

- Availability at a reasonable price. Reasonable price is determined on a case-by-case basis. However, any seed over $35 per pound should be scrutinized and justified. (For example: A highly desirable forb is $45/lb. Instead of seeding at 1 lb/acre, managers should consider 0.25 or 0.1 lbs/acre to reduce the cost per acre and still include the species in the seed mix.)

- Suitability of the area to be seeded (avoid use of "one size fits all" seed mixtures on landscapes with different site potentials). The use of local native genotypes is encouraged as long as seed can be applied at the proper time at a reasonable cost; that cost compared to a commonly available cultivar.

- Impacts of competition (weeds, other plants in the seed mixture, land uses) on native plant establishment and persistence.

- Approved LUP decisions, e.g., natives only in wilderness study areas (WSAs).

- Approved BLM policy at the State level.

Planting techniques should be based on the seedbed requirements of different plants in the seed mixture. For example, some species may need to be planted in separate rows or different depths than other plant species. For example: Indian ricegrass germinates best when seeded at 2-4 inches; however, Wyoming big sagebrush seed prefers to be spread directly on a bare surface and very lightly covered with soil (1/16 inch). Seed should be drilled or covered by dragging a chain, harrow, or other implement. Use aerial broadcast seeding only where it has shown to be successful over a period of years, based on experience or studies. Drilling and covering the seed

usually results in the best success while aerial/broadcast seeding without covering has some of the lowest success. Scientific studies and technical specialists with experience should be consulted since success or failure of this type of project is contingent on proper seed selection and application, coverage, and climatic events.

Seedings should occur during the appropriate season to ensure seed stratification (cold temperatures), germination, and establishment. Fall seedings are recommended for sites requiring cool season species revegetation. Spring seeding may be appropriate for warm season species in certain regions such as the Southwest desert. Early spring transplanting of seedlings is recommended to better utilize available moisture, thereby improving the success of seedling establishment. Consider postponement of seeding if the site is in a prolonged drought or if a seeding cannot be accomplished during the proper time period.

The use of certified seed (i.e., blue tag) for plant cultivars is recommended (if available and cost effective) to insure that desired genetic traits are present. The use of "source identified seed" (i.e. yellow tag) is recommended when native seed is collected from wildland sites to insure that a local or otherwise adapted seed source is used to revegetate the burned area. Also see Seed Selection section.

Straw and other vegetative mulch materials (rice hulls) must be purchased as "certified weed-free" and should be sampled and tested for noxious weeds prior to use.

Seeding using different plant species on different portions of the burned area is acceptable (refer back to Ecological Site descriptions). Within a burned area, the use of more fire resistant plant species along roadways in high fire frequency areas in order to protect new stabilization or rehabilitation seedings is acceptable providing the cost does not exceed the average cost for the rest of the seeding effort.

Also see Fuels Management/Greenstrips, Seed Selection, Testing, Treatments, and Purchasing sections.

25. Road Stabilization

Road maintenance using ES&R dollars is limited to the following items:

- Repair of ES&R activity damage.
- Pulling ditches as part of culvert/rolling dip activities designed to increase water/material flow capacities and prevent a road from “blowing out”.
- Water bars or other structures to prevent road materials from eroding.

The following road maintenance related items are prohibited using ES&R funding.

- Normal road maintenance.
- Road reconstruction.
- Improving the road to better than pre-fire conditions.
- Maintenance, construction, or reconstruction of vehicle bridges (bridges are considered a major facility).

26. Rock Check Dams

Rock check dams are used where runoff is concentrated in a drainage way, swale, or road ditch that has lost all its natural protection due to the fire, or will receive increased flow rates as a result of fire in the contributing drainage area. The rock dams will reduce erosion and trap sediment generated from adjacent areas or the ditch. Rock check dams should be limited to use in open channels that drain 50 acres or less. The construction of rock check dams is an appropriate use of ES&R funds. See Colorado NRCS Fact Sheets, at http://www.co.nrcs.usda.gov/technical/eng/ROCKCHECKfactsheet.pdf.

27. Safety and Public Health

Public use facilities such as campgrounds and restrooms that pose a health or safety risk after a wildfire can be stabilized or closed to public use using ES&R funds to protect human health and public safety. Law enforcement necessary for protection of public health and safety or for protection of natural and cultural resources should typically be funded from existing program funding; however, there may be extraordinary circumstances that require ES&R funding for law enforcement efforts based on values-at-risk. Also see the Law Enforcement and Recreation sections.

A risk assessment must be prepared for pertinent ES&R activities. On an active fire the same safety rules that apply to suppression also apply to ES&R activities.

28. Seed Selection, Testing, Treatments, and Purchasing

The use of native species is preferred to non-natives for ES&R projects. However, a mixture of native and non-native species is preferable to using only non-natives if the desired natives are not available, and if the use of non-natives is consistent with approved LUPs. Competitive non-native seed or plants should not be used in a seed mixture to facilitate the establishment and persistence of the native species.

Policy: All Field Offices are required to use seed on public land that contains no noxious weed seed and meets certified seed quality. Prior to BLM purchasing or accepting seed from any source, all seed must have a valid seed test, within one year of the acceptance date, from a seed analysis lab by a registered seed analyst (Association of Official Seed Analysts).

Noxious weed seed is not allowed in certified seed according to individual State's Department of Agriculture seed law and the Federal Seed Act (7 USC 1551-1610) and specifications JJJ-S-181. (The Federal Seed Act can be found at http://www.ams.usda.gov/lsg/seed/fsa-98.pdf.)

It has been acceptable for the seed lot (excluding species on the State and Federal noxious weed seed list) to contain from 0.5 percent by weight of other weed seeds; and the seed lot shall contain no noxious, prohibited, or restricted weed seeds according to State seed laws in the respective State(s). "Other weed seed" is defined as any non-noxious weed seed, such as cheatgrass (downy brome) or Russian thistle, in the State(s) of concern. Seed may contain up to 2.0 percent of "other crop seed" by weight which includes the seed of other agronomic crops and native plants; however, a lower percent of other crop seed is recommended. Copies of the seed lab test results, including purity and germination (viability) rate, must be forwarded to the

appropriate BLM office prior to seed application. If the seed does not meet the BLM and State/Federal standard for noxious weed seed content or other crop seed allowances, it shall not be applied to public land. All seed test results must be retained in the seeding project file.

Seed can be purchased that has been processed to enhance seed germination and survival. Some seed processing includes adding rhizobia inoculants for nitrogen fixation on legumes (including alfalfa), fungicide added to the seed, mycorrhizae inoculants of various beneficial fungi, and soil nutrients. Legume seed can be purchased with or without rhizobium inoculant. Each legume species or genus usually has a specific rhizobium bacterium that grows in association with it. Rhizobia and mycorrhize are short-lived unless maintained in cold storage. The "shelf-life" is typically six months to one year. Re-inoculate legume with fresh rhizobium if the treated seed has been stored more than one year.

Seed can be procured with a coating (also know as "pilling") that often consists of inert clay with inoculants and/or soil nutrients (fertilizer). One purpose of seed coating is to add weight with the soil-like material surrounding the seed to facilitate sowing by seed drills and aerial application. Coating seed is expensive and seeding rates must be adjusted to allow for the increased individual coated seed size and weight.

In the case of mycorrhizal inoculated seed, there may also be limitations with the soil pH on the site or the specific mycorrhizae for arid land plants are not available. It is often not necessary to include nutrients or fertilizer, especially nitrogen, with seed. Increased available nitrogen may be a factor on burned sites. Free nitrogen after a fire is usually not a limiting factor for plant growth. An increase in nitrogen after fires often promotes weed growth (including cheatgrass) as well as pioneer (early seral) plant species. Before purchasing seed enhanced with inoculants, mycorrhizae, or nutrients, analyze the cost and benefit to meeting seeding expectations. Check with knowledgeable seed specialists, agency and university researchers and seed research literature for additional information.

Seedlings (containerized or bare root transplants), Slips

Containerized or bare root seedling planting (transplanting) is an acceptable treatment. Limited transplanting or nursery stock may be necessary to reintroduce a species into the disturbed area as a future seed source. Transplants require protection from herbivores and may require limited watering during the establishment period. Funding for watering is approved on a case by case basis.

Seeding Methods

Drill Seeding

Drill seeding is the preferred method for planting most types of seed and can achieve better plant establishment. Some monitoring studies indicate a success rate as high as 70%. It provides better seed contact with the soil and seed can be applied at a calculated rate. The required depth can be met more easily (Indian ricegrass should be placed 2-4 inches deep to enhance germination and survival).

Limitations include slope and seed types such as smaller seed or heavy seed which may vibrate to the bottom of the drill and result in poor seed distribution. Most drills cannot deal effectively

with fluffy seed (winterfat) or small seed (big sagebrush). The Drill Shop currently possesses 25 drills which have fluffy seed boxes and small seed boxes (alfalfa box). Four of these drills are Truax Rough Rider rangeland drills with better depth control and packer wheels for better seed contact. Minimizing surface disturbance can also minimize weed invasion. The Drill Shop also currently has 39 drills with the alfalfa boxes for better planting of the small seeds. Another major limitation is unburned vegetation such as pinyon or juniper trees, or large rock surfaces. Drill seeding can result in some ground compaction and slight soil disturbance depending upon weather conditions. In areas with high resource values that are not compatible with disturbance associated with drilling, it may be necessary to mark areas to avoid prior to seeding (i.e., cultural resources, survey markers, special status species, etc.).

Aerial Seeding

Aerial seeding without covering the seed is much less reliable than drill seeding. Monitoring studies have shown low success rates particularly for shrubs such as big sagebrush. However, aerial seeding has no terrain limitations and can be effective on rocky slopes. This application method has no impact to the soil, cultural resources, or to special status species.

To ensure good information on acreage covered in the aerial seeding, a GIS shape file should be required in the aerial contract and in the monitoring plan.

Broadcast Seeding

The use of ATV mounted seeders, “organ grinders”, truck mounted seeders, or tractor dribblers can be used on smaller tracts of land. This is often the preferred method for small quantities of specialized seed or in specific areas in which little or no ground disturbance is desired. On these small acreages, the seed should be covered by towing a harrow, sheep’s foot, or chains behind the ATV or truck.

Chaining After Aerial or Broadcast Seeding

Chaining, harrowing, or some method to cover the seed or incorporate the seed into the soil is preferred over simply broadcast or aerial seeding. Chaining can be accomplished over terrain where it is impossible or impractical to pull drills. Burned trees and shrubs may be knocked down to contact the soil surface and aid in erosion control as well as providing protection and favorable microsite conditions for seeds. A seed dribbler can be attached to a tractor to dispense larger seed species (for further discussion of seeding methods, see: Monsen, S.B. and others, 2004; Restoring Western Ranges and Wildlands, Volume 1, Chapter 9). Anchor chains are available at some BLM offices (Salt Lake, Filmore, Battle Mountain, Burley, and others), as well as other equipment, including the Dixie Harrow (Richfield). Further information on the use of the Dixie Harrow can be found at NSTC’s Library website or http://www.blm.gov/nstc/resourcenotes/rn75.html.

Seeding Rates

A large percentage of ES&R funding goes toward seed purchase and application. Determining and applying appropriate seed rates is an essential aspect of developing cost effective plans and for treatment success. ES&R plan preparers should consult the BLM National Seed Coordinator and other local plant material specialists when developing seeding treatments to determine the most appropriate species, seeding method, and seeding rate.

The USDA recommendation for drilled seeding rate for large seeded species is 20 seeds (PLS) per square foot. The recommended drill seeding rate for small seeded species (most BLM seed mixes) is 30 to 40 seeds per square foot.

Broadcast or aerial seedings are recommended at the rate of 60 to 80 seeds per square foot (approx. double the drilled rate).

Aerial or broadcast seeding rates should not be higher than has proven to be successful and cost effective. As an example, 0.2 lbs PLS of Wyoming big sagebrush seed (approx. 1.25 lbs bulk) per acre equals 11.5 sagebrush seeds per sq. ft. should not be exceeded, even in an aerial seeding.

In the same project area, considerations must be made for treatments planned in both the ES Plan and BAR Plan for all seeding treatments, including aerial, broadcast, and drilling. If multiple seed applications are planned the rate per treatment should be lowered so that the total seed rate, combining all application methods, does not exceed 80 seeds per square foot. All ES Plans and BAR Plans must calculate and display proposed seeding rates.

29. Severity Data Collection
The purchase of remotely sensed data to determine fire severity is an appropriate use of ES&R funds. It may be advisable to call the Branch Chief, Branch of Resources Technology (ST-134, at the National Science and Technology Center) for information on sources for remotely sensed information, including burn severity. It may also be appropriate to discuss the potential for the use of remotely sensed information in project planning, layout, and monitoring.

30. Silt Fences
Silt fences can be effective in reducing soil erosion and may be purchased using ES&R funds. See Colorado NRCS Fact Sheet Silt Fence, available at:
http://www.co.nrcs.usda.gov/technical/eng/SILTFENCEfactsheet.pdf and Robichaud, P.R. and R.E.Brown, 2002.

31. Soil Stabilization
See Log Erosion Barriers, Seeding, Mulch, Straw Bales/Wattles, Contour Log Felling, Silt Fences, Revegetation, and Rock Check Dams sections.

32. Standards for Rangeland Health and Guidelines for Grazing Management
BLM grazing regulations that established a framework for the development of Standards for Rangeland Health and Guidelines for Grazing Management (43 CFR 4180.1) became effective on August 21, 1995. These standards and guidelines were developed on a regional or state basis in coordination with the State Resource Advisory Council(s) and were incorporated into land use plans. They are intended to ensure that rangelands are managed to achieve the fundamentals of rangeland health (43 CFR 4180.1 (a) through (d)). Applicable standards and guidelines should be reviewed and incorporated as part of the ES&R planning process to ensure compliance with the intent of these regulations and the associated land use plan. All existing PESRPs should be reviewed and modified (if necessary) to ensure compliance with standards and guidelines. The

application of additional restoration processes beyond three years following wildfire control to obtain full ecological process function must be funded through other sources.

33. Straw Bales/Wattles

Straw bales or wattles, when installed properly, can be effective in reducing sediment delivery by trapping soil and are an appropriate use of ES&R funds. Straw bales or wattles must be certified weed-free. See Colorado NRCS Fact Sheets for specifications, available at http://www.co.nrcs.usda.gov/technical/eng/STRAWWATTLESfactsheet.pdf.

34. Suppression Activity Damage

Funding the repair of fire suppression activity damage is not an appropriate use of ES&R funds (620 DM 3.10). Repair of fire suppression activity damage is to be planned and performed primarily by the suppression incident organization as soon as possible and prior to demobilization. Funding for fire suppression activity damage repair actions will come from the Wildland Fire Operations, Emergency Suppression subactivity and will be charged to the project code for the wildfire suppression effort that resulted in the damage.

Repairing damage to improvements and/or to resources caused by fire suppression activities should be accomplished by the fire suppression incident management team. This work should be completed prior to final demobilization of the suppression forces whenever practical. For example: Where heavy equipment was used to construct fire lines, it may be more economical to use the same heavy equipment to stabilize/rehabilitate those fire lines before being released from the incident. The same would hold true for lines constructed by hand crews. Those same crews could "put the lines to bed." The suppression account remains open for several months after an incident to complete these activities. The following repair activities (necessitated by fire suppression activities) are examples of repairs that will be completed with wildfire suppression funds, not ES&R funds:

1. Replacement of displaced soil and/or seeding vegetation on fire control lines [seeding may be delayed until the appropriate time (fall) to enhance success].
2. Construction of water bars on primary and secondary fire control lines.
3. Repair of structural improvements or facilities (e.g., fences) damaged by suppression activity.
4. Repair of damage caused by operating the incident command base (spike camps and roads).
5. Repair of roads used to access fire lines.
6. Replacement of survey markers (cadastral markers) damaged due to fire suppression tactics.
7. Stabilization of cultural sites disturbed by suppression activities.

During periods of high fire activity, fire suppression personnel may be unable to complete these tasks before being redirected to another incident. In these cases, the ES&R team may assess the suppression damage in the ES&R plan, implement appropriate treatments, and charge the work to the fire suppression account for the incident.

35. Threatened, Endangered and Sensitive Species

The policy of the BLM is to conserve threatened and endangered (T&E) plant and animal species through conservation of the habitats upon which they depend and work closely with the U.S. Fish and Wildlife Service (Ecological Services Offices) or the National Oceanic and Atmospheric Administration (NOAA) Fisheries, as appropriate, on all emergency stabilization actions that may affect a threatened and endangered listed species or its habitat to ensure compliance with Section 7 of the Endangered Species Act. Timeframes for review and consultation may last several months. Therefore, every effort should be made to initiate these actions early in the emergency stabilization planning process. A burned area assessment should identify post-fire threats to Federal, Tribal, and State listed or proposed threatened and endangered species and what, if any, cost effective stabilization and rehabilitation measures can be implemented to prevent further post-fire degradation to their habitat.

Although the ES&R goals and objectives are to prevent further degradation to T&E species habitat - - biophysical or budgetary constraints may not allow BLM "to do everything possible" to mitigate the loss of T&E habitat. For example, the desired site-specific native seed may not be available in quantities needed or it may not be feasible to reseed because of the lack of precipitation, i.e., the site is too dry. The BLM consults with the U.S. Fish and Wildlife Service (USFWS) or NOAA Fisheries, as appropriate, on all actions that may affect a listed species or its habitat to ensure compliance with Section 7 of the Endangered Species Act. A similar process is required for state agencies when State-listed species are involved.

The BLM policy on federally listed species, species proposed for listing, candidate species, sensitive species, and State-listed species is contained in BLM Manual 6840 – Special Status Species Management. This Manual should be reviewed for additional management requirements for proposed species. Time frames for review and consultation may last several months. Therefore, every effort should be made to initiate these actions early in the ES&R planning process. It may be valuable to initiate discussions during the development of the PESRP and in pre-season meetings. The completion of the Section 7 Consultation process is a major benefit of preparing a PESRP.

As a result of the National Fire Plan efforts there may be procedures that can expedite the consultation process on T&E species. In addition, some locations or regions may have additional guidance that has been developed for the conservation of habitats for some species (examples could include lynx or sage grouse).

Removal and relocation of threatened or endangered:

- The FS, BLM, BIA, and NPS do not have the authority to move threatened or endangered species. When threatened or endangered species need protection, the appropriate federal, tribal or state managing authority must be identified and consulted.
- The land management agency and threatened and endangered species management authority can enter into agreement about how and who will remove and relocate the species.
- The land management agency may set up a reimbursable account for the threatened and endangered species management authority to reimburse the land management agency use of emergency stabilization funds.

Post-fire monitoring of T&E species status or recovery is not an appropriate use of ES&R funds. Monitoring for the purpose of assessing ES&R treatment effectiveness is appropriate.

36. Trails

To protect public safety, trails should be closed after fire until an assessment can be completed certifying the trail is safe. When closure is not possible, burned slopes in the immediate proximity above and below the trail as well as the trail can be stabilized. Rehabilitation funding may be used to repair trails. Particular attention should be given to repair trails for public access to essential services. The emergency stabilization of any trail to a standard above its pre-fire condition is also prohibited. Appropriate trail stabilization/rehabilitation measures which are funded with ES&R funds include:

- Hazard Tree Removal – (see Hazard Tree Removal section)
- Trail Slopes - Stabilization of burned slopes in immediate proximity above and below the trail to prevent further trail degradation.
- Waterbars (breaks) - The absence of or insufficient waterbars may create erosion induced safety hazards. Construction of the soil, rock or log waterbars is appropriate, but waterbars damaged or destroyed as a result of suppression efforts are repaired and/or replaced with wildfire suppression funding.
- Trail Markers – Replacement of trail markers or signs burned by the wildfire is appropriate.

Using ES&R funds for the repair or replacement of major trail facilities is prohibited.

37. Treatment Failures

ES&R treatments may fail for a variety of reasons. Emergency stabilization funding may be used for up to three years to "repair or replace emergency stabilization structures or treatments … where failure to do so would imperil watershed functionality or result in serious loss of downstream values …." Funding for retreatments must be approved by the original approving administrative level, i.e., State Office for ES Plan under $100,000, or the WO for ES Plan $100,000 or above. When a seeding or planting is determined to be a failure through documented monitoring, funding from the Burned Area Rehabilitation account may be requested to retreat the area. Since ES&R activities are limited to no more than three years from fire containment, failures of seeding and planting may not be immediately evident and pursuit of other funding sources may be necessary.

38. Visual Resources

Assessing the potential impacts of treatments on visual resources (http://www.blm.gov/nstc/VRM/vrmsys.html) is required for all BLM activity planning efforts. Refer to BLM Manual 8400 - Visual Resource Management (http://www.blm.gov/nstc/VRM/8400.html) for guidance on evaluating ES&R project impacts on visual resources and BLM Manual 8431 – Visual Resource Contrast Ranting (http://www.blm.gov/nstc/VRM/8431.html) which provides guidance for completing a visual resource contrast rating worksheet.

39. Wilderness Areas

The regulations providing authority for ES&R activities in wilderness areas are found in 43 CFR 6300. BLM Manual M-8560 and Handbook H-8560-1 (Management of Designated Wilderness Areas) provides general guidance on surface disturbing activities in wilderness areas. By policy, wilderness management plans are required for all designated wilderness areas, and this direction must be reviewed during PESRP and ES&R plan development for specific direction to guide ES&R activities. BLM's 8560 Manual, Section 8560.34C.3 states, "Hand or aerial seeding of native vegetation species may be permitted after disturbances, such as wildfire, to restore essential food plants to a wilderness where the natural processes of healing is not expected to occur." Section 8560.36A.2 states, "Re-establishment of vegetation as a watershed-restoration measure, where there is no reasonable expectation of natural healing, will be accomplished using native or naturalized species." Before seeding equipment is used, a determination must be made that this method is necessary to meet the minimum requirements for the administration of the area as wilderness. If ES&R treatments are determined to be necessary, consideration must be given first to achieving the recovery objectives using non-motorized equipment. Overland-motorized equipment will only be considered in cases where the objectives cannot be accomplished with non-motorized equipment, and there is a threat to wilderness values if no action is taken.

40. Wilderness Study Areas

Handbook H-8550-1 [Interim Management Policy (IMP) for Lands Under Wilderness Review] includes BLM policy and guidance for management of wilderness study areas (WSAs). WSAs must be managed in a manner so as not to impair their suitability for preservation as wilderness. Impacts from the equipment used for seeding must not impair wilderness suitability. In response to wildfire, any treatments needed must be conducted to the extent feasible in a manner that will not impair wilderness suitability. The ES&R work will use minimum tool methods that are least damaging to wilderness values. Per WSA policy, reseeding and planting will utilize species native to the area. Consult current instruction memoranda, WSA Handbook H-8550-1, and the Bureau's local, State or National wilderness specialist prior to implementing ES&R treatments in a WSA. Coordination with interested public and wilderness organizations is encouraged early in the ES&R planning process. Depending upon location, visibility, and sensitivity of the incident, coordination with the National ES&R Program Lead or Wilderness Coordinator may also be advisable.

41. Wild Horse and Burro Management

Exclusion of wild horses and burros may be critical for the recovery of burned vegetation or establishment and maintenance of new seedings. There are two wild horse and burro related activities for which ES&R funds can be used. The first, and preferred, is to exclude the wild horses or burros from the burned area through use of protective fencing. Care must be taken to assure wild horses and burros are not excluded from traditional water sources when constructing protective fencing. The second related activity is to remove or relocate the wild horses or burros through gathers/roundups. Gathering wild horses or burros requires close coordination with State and National ES&R Program Leads, and the State and National Wild Horse and Burro Program Leads to insure adherence to policy. Exclusion or relocation must occur before the animals significantly damage the recovery of seeded or recovering vegetation. Emergency stabilization funds may be used for gathering and temporary holding which includes

transporting, processing, and sorting the animals at a BLM facility. Funding long-term holding of these animals is not an appropriate use of ES&R funding.

Additional use supervision may be required to ensure that wild horses or burros are not accidentally trapped within the treatment areas if they inadvertently gain access. It is also important to ensure that wild horses or burros do not get trapped without access to water or be allowed to damage the seeded or recovering areas. Care should be taken to minimize the blocking of migration or water trails with protective fences. New fences may need to be flagged or constructed with special horse crossings/gates to alert horses to their presence or allow safe crossing.

42. Wildland Fire Use

Wildland Fire Use (formerly referred to as prescribed natural fire or fire for resource benefit) is the management of naturally ignited wildland fires to accomplish specific pre-stated resource management objectives in pre-defined geographic areas outlined in the Fire Management Plan.

ES&R funding is not appropriate for Wildland Fire Use fires [620 DM 3.7J and 3.8J(1)]. However, if a Wildland Fire Use fire escapes and is converted to a wildfire, then emergency stabilization and rehabilitation funding may be appropriate for only those acres that are delineated or partitioned following the declaration as a wildfire.

All wildland fires that escape approved management actions are managed in accordance with decisions in a Wildland Fire Situation Analysis (WFSA). Emergency stabilization and rehabilitation cost estimates are to be included in the cost analysis portion of the WFSA.

Minor facilities and structures such as fences or kiosks on BLM lands that are burned during a Wildland Fire Use fire that is declared a wildfire may be repaired using ES&R funds. The use of ES&R funds to repair/replacement of major facilities and structures such as telephone poles, buildings, or homes burned on BLM, other agency, or private lands as a result of a Wildland Fire Use fire is prohibited.

43. Wildlife

Wildlife populations disturbed or displaced by the fire, may concentrate on and degrade unburned areas in and adjacent to the burned area, and may have a major affect on the success of emergency stabilization treatments. Agreements with the appropriate fish and wildlife management agencies (if needed) should be developed before the emergency stabilization or rehabilitation treatments are implemented, prescribing how wildlife is managed. Coordination should be done with wildlife agencies during the development of the PESRP or ES&R Plans. The PESRP or ES&R Plans should identify what measures are needed to prevent further burned area degradation from wildlife use, and treatment specifications should address timely implementation. If wildlife control techniques are not installed before next season's green-up, a majority of the animal damage will have occurred. By green-up, there will probably be enough forage in the burned area to prevent any concentrated damage in the unburned area, and treatment after green-up would not be cost effective.

Protective fences or other animal control measures should be constructed prior to negative impacts occurring on burned areas.

ES&R treatments must be consistent with wildlife habitat management objectives in approved LUPs. Seeding criteria must include an analysis of cost, species, adaptability, probability of success, weed competition, as well as other criteria in important wildlife habitats. The reconstruction of wildlife improvements on public lands may also need to be addressed in the ES&R plans, and should be in accordance with policy and in coordination with the appropriate agencies and non-governmental organizations. These improvements should also be in BLM databases (RIPS or its replacement) and cooperative agreements in place before funds are expended on them. In some cases they may be the property and responsibility of the wildlife agency, but should still be in BLM's databases as improvements.

ES&R funds may not be used to study, monitor, or research the effects of a wildfire on wildlife species. Appropriate actions to mitigate impacts to wildlife habitat may be proposed in ES&R Plans such as seeding/planting vegetation needed by a wildlife species or to reduce sediment and ash from entering a stream.

Treatments to mitigate the loss of fish and wildlife habitat are not appropriate for emergency stabilization funding except to prevent permanent impairment of designated critical habitat for federal, state listed, proposed or candidate threatened and endangered species.

The BLM does not have the authority to "relocate" any wildlife species. Also see Threatened, Endangered, and Sensitive Species section.

44. Wyden Amendment

The Wyden Amendment (16 U.S.C. 1011(a) as amended) provides the authority by which the BLM may consider funding work on non-BLM administered land that will have a benefit to public land. The Wyden Amendment is one of several laws providing BLM the authority to enter into watershed restoration and enhancement agreements (i.e., cooperative agreements) with non-BLM landowners such as other Federal agencies, Tribal, State, and local governments and private or nonprofit entities for the protection, restoration, and enhancement of fish and wildlife habitat and other resources on public or private land and the reduction of risk from natural disaster where public safety is threatened that benefit these resources on public lands within the watershed.

Wyden policy/guidance may change annually. Please check latest information before entering into any Wyden agreements.

Terms and Conditions for Using the Wyden Amendment

A cooperative agreement must be prepared and mutually agreed to by the Authorized Officer, the Financial Assistance Officer, and the landowner. The agreement shall be signed prior to project implementation and shall address the following terms and conditions:

- The project should reduce the risk from natural disasters where public safety is threatened or protect, restore, or enhance fish and wildlife habitat and other resources on public land in the watershed/landscape context.

- Provide for technical advice and assistance by the BLM in the planning of management activities that will further the purpose of the agreement. Examples include NHPA Section 106 cultural compliance and consultation; ESA Section 7 T&E compliance and consultation; NEPA documentation; Section 404 permits, etc.

- Partners to the cooperative agreement shall share in the cost as appropriate. Such costs may be in the form of contributed funds, in-kind services (such as providing equipment, monitoring, or maintenance activities), donated easements, rights-of-ways, or other real, personal, or property interest, or include other funding sources (described below). See Assistance Agreement Manual 1511 for additional information on contributed funds and in-kind services, etc.

- The project must show benefit to resources on public land within the watershed and be in the public interest.

Non-federal landowners may seek out other sources of funding to be used in conjunction with the Wyden Amendment including, but not limited to: other government programs such as the Natural Resource Conservation Service's Environmental Quality Incentive Program (EQIP), the Emergency Watershed Protection Program (EWPP), and the Environmental Protection Agency's Total Maximum Daily Load (TMDL) Program, as well as other non-profit non-governmental organizations. However, other federal dollars cannot be used as the recipients matching funds.

The Authorized Officer or BLM Agreement Officer may require other terms and conditions to protect public investments on non-BLM lands, provided they are mutually agreed to by the Authorized Officer, Financial Assistance Officer, and the landowner. Consideration should be given to the following issues:

- **Timeframe.** Identification of the timeframe or anticipated life span of the project or practice. This should be commensurate with the desired benefit and anticipated time needed to achieve stated goals/objectives.

- **Project inspection and validation.** During the construction/implementation phase of the project, inspections must be conducted to ensure the project meets design specifications and to ensure the funding was used correctly. A post construction/implementation document should be included in the Administrative File.

- **Monitoring requirements.** Monitoring should address whether the project was implemented as planned, the success of achieving written objectives, and whether there is a continued need for the project/practice and the cooperative agreement. The agreement should identify the frequency of monitoring and who should be involved. When monitoring is considered an in-kind service by a non-Federal landowner, BLM must set

forth a process whereby BLM periodically reviews and maintains the data collected and ascertains the effectiveness of the monitoring.

- **Maintenance responsibilities.** The agreement should identify the party responsible for periodic maintenance of capital improvements and land treatments. When maintenance activity is part of the in-kind service by a non-Federal landowner, BLM must set forth a process whereby BLM periodically ascertains the effectiveness of the maintenance activities. It must also be clear where and when any maintenance required will need to meet the same legal requirements (and specifications) as the projected implementation.

- **Responsibilities of non-BLM landowner**. The cooperative agreement should indicate ownership of all capital improvements and land treatments. When ownership of high value improvements is passed to the non-BLM landowner, in order to protect BLM's long term investment, the agreement should tie capital improvements and applicable land treatments to the land through recorded instruments such as a conservation easement or real estate conveyance instrument. See Acquisition Handbook H-2100-1 and Land Exchange Handbook H-2200-1 for further guidance.

Additional Wyden Amendment Guidance

- The State Director will be responsible for assuring BLM has funds available and that they are being spent in the public interest on priority projects that benefit resources and public lands within the watershed.

- The authority to enter into and execute cooperative agreements resides with the appropriate BLM Financial Assistance Officer. It is strongly encouraged that any offices considering use of the Wyden Amendment authority engage their State Procurement Analyst or Financial Assistance Officer early on in the process.

- Cooperative agreements must meet all of the requirements for entering into such agreements set forth in 43 CFR Part 12 and BLM's Assistance Agreement Manual 1511 and subsequent guidance.

- Projects using Wyden authority, even when they are on non-Federal lands, must comply with all applicable Federal, state, and local laws, regulations, policies, and permit requirements (e.g., the Federal Land Policy and Management Act (FLPMA), the National Environmental Policy Act (NEPA), the Clean Water Act (CWA), the Endangered Species Act (ESA), the National Historic Preservation Act (NHPA), etc.).

- An official file shall be kept at the local office on all Wyden Amendment projects. BLM will document how the decision was reached to expend BLM funds on non-BLM lands and how the expenditure of these funds is in the public interest and reduces the public safety risk from natural disaster, or how it protects, restores, and enhances fish and wildlife habitat and other resources on public lands. A copy of the cooperative agreement must be kept in this file (the original signed document is retained in the Procurement Office).

- All expenditures using the Wyden Amendment shall be with the concurrence of the National ES&R Program Lead.

IV. Environmental Compliance

A. Overview of NEPA Options

The purpose of this section is to briefly describe the available methods to efficiently accomplish NEPA compliance for ES&R projects. NEPA implementing regulations are found at 40 CFR 1500. BLM Handbook 1790-1 provides further NEPA compliance guidance. The interdisciplinary assessment and planning team should include input and guidance from the local NEPA specialist.

Prompt action following a wildfire is necessary to stabilize and prevent unacceptable degradation to natural and cultural resources, minimize threats to life and property, repair or improve lands unlikely to recover to a management approved condition, and repair or replace minor facilities damaged by fire. Following a wildfire, site-specific ES Plans and BAR Plans are prepared to describe the treatments necessary to address the fire damaged lands. Compliance with NEPA is required for these planning efforts.

Projects anticipated to have significant impacts are extremely rare in the ES&R program and require preparation of an EIS or consultation with CEQ for alternate NEPA procedures.

The most efficient method to document NEPA compliance for ES&R projects when the PESRP contains adequate NEPA analysis is by preparing a DNA (see Section IV B below). Covering both emergency stabilization and rehabilitation actions, Programmatic ES&R Plans (PESRPs) provide a complete analysis of the typical ES&R treatments most commonly used within a District or Field Office unit.

Offices without a PESRP should consider whether a categorical exclusion applies or if an EA or EIS is needed. The categorical exclusion for rehabilitation activities established under the Healthy Forests Initiative (HFI) in 2003 has some limitations: the project area cannot exceed 4,200 acres and cannot include use of herbicides or pesticides or the construction of new permanent roads or other new permanent infrastructure. If the BAR Plan exceeds these limitations or any of the extraordinary circumstances apply, an EA or EIS would be required.

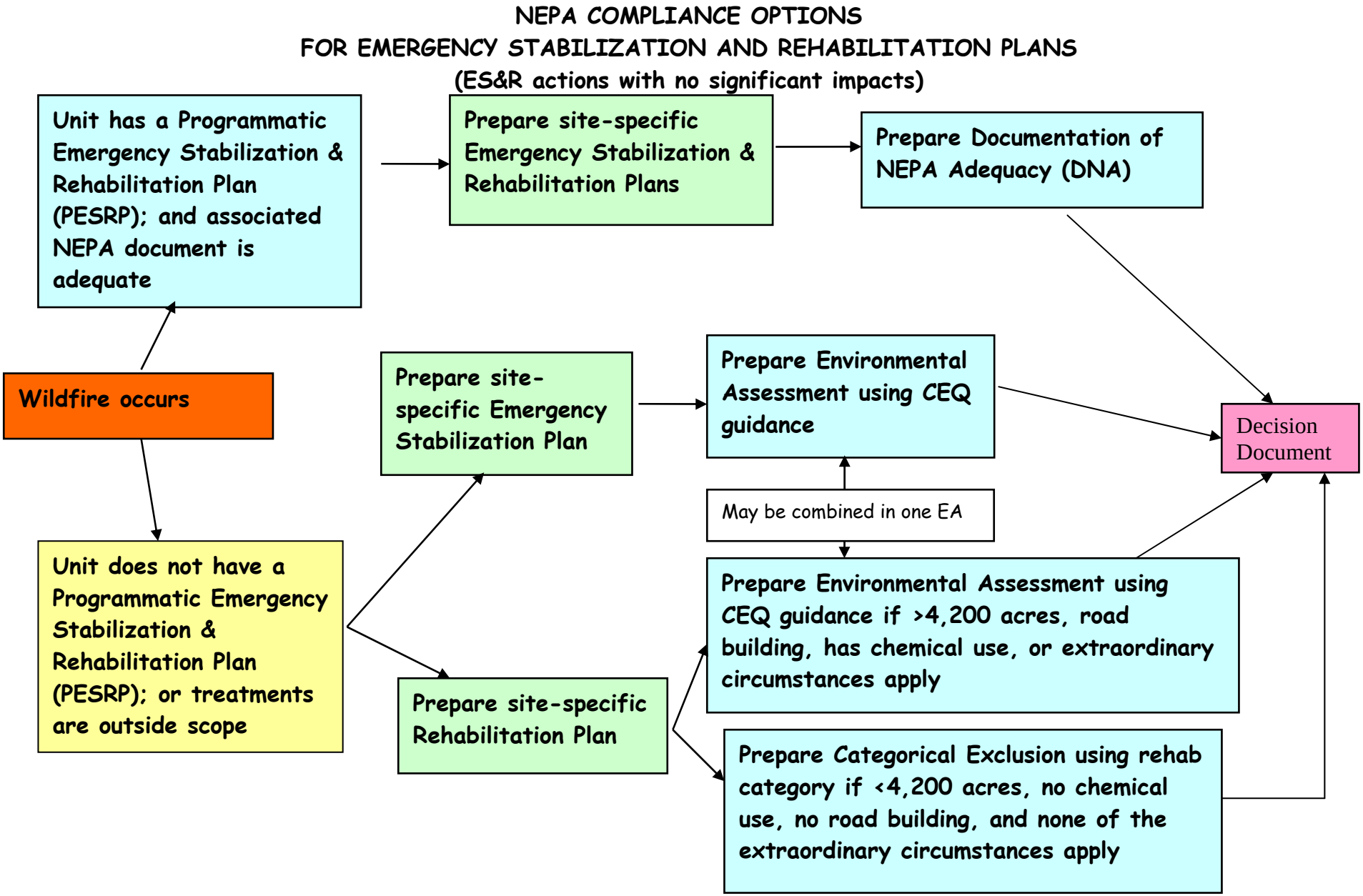
Emergency stabilization actions are not included in the HFI categorical exclusion for rehabilitation; therefore an EA or EIS is required for these actions if a PESRP/EA is not in place or the proposed emergency stabilization treatments are outside the scope of the PESRP. The CEQ guidance on focused EAs offers an efficient manner to document NEPA compliance for emergency stabilization activities as well as rehabilitation activities that exceed the limitations of the categorical exclusion.

Figure 4 illustrates the NEPA options for ES&R projects that have no significant impacts. Offices that experience frequent fires should consider preparing a PESRP, with associated NEPA documentation, to gain efficiencies in NEPA compliance and to meet the short timeframe. In lieu of a PESRP, offices are encouraged to use the new categorical exclusion for rehabilitation

where appropriate. Preparing EAs using the CEQ guidance also provides an excellent means of efficiently documenting NEPA compliance.

The local NEPA specialist should be consulted for additional guidance on current BLM NEPA requirements.

Figure 4 - NEPA Options Diagram



B. Documentation of NEPA Adequacy (DNA)

A Programmatic ES&R Plan (PESRP), with associated NEPA analysis (typically an EA), is a programmatic document developed at the landscape level for a District or Field Office unit, prior to a wildfire occurrence. See Appendix 2 for a sample PESRP outline. After a wildfire, a PESRP assists in the timely preparation of ES&R plans by providing a pre-analyzed tool box of treatments based on the local unit's typical post-fire conditions. Optimally, the PESRP should include all of the treatment techniques and potential species that may be used into the future. In this manner, when the need arises to implement the plan there has been ample opportunity for any public response to the techniques or prescriptions proposed and a DNA may be appropriate to document that previously prepared NEPA analysis is adequate. It has also been reviewed by personnel within the BLM programs and offices as well as other interested government offices.

A Documentation of NEPA Adequacy (DNA) worksheet is completed to confirm and document the rationale for concluding that the proposed ES&R treatments are within the scope of the NEPA analysis associated with the PESRP. Generally, existing NEPA documents can be used when: (1) a current proposed action was previously proposed and analyzed (or is part of an earlier proposal that was analyzed); (2) resource conditions and other relevant circumstances have not changed significantly, and there is no significant new information germane to the proposed action; and (3) there is no suggestion by the public of a significant new and appropriate alternative. A decision document for the action is necessary in addition to the DNA. See BLM NEPA guidance on preparing a DNA.

C. Environmental Assessments (EAs)

The Council on Environmental Quality (CEQ) issued guidance (December 9, 2002) for EAs prepared for forest and rangeland health projects that is also applicable to other actions where timely decisions are critical. The CEQ guidance focuses on the core elements required in the EA process: (1) need for the proposal; (2) proposed action and alternatives; (3) environmental impacts; and (4) agencies and persons consulted. The content for these four core elements is described in the section titled Contents of a Model Forest Health Environmental Assessment in the CEQ guidance. Though described in terms of a forest health project, the content topics are applicable to ES&R projects. Other formats for EAs are also found in the BLM NEPA Handbook (H-1790). Beyond the minimal requirement there is great flexibility in what information may be presented in an EA.

D. Categorical Exclusions (CXs)

In 2003 two categories of actions were added to the Department of the Interior's list of categories which are excluded from additional documentation in an EA or EIS (516 DM 2, Appendix 1, 1.12 and 1.13) under the Healthy Forests Initiative (HFI) effort. These categories are: (1) hazardous fuels reduction activities and (2) rehabilitation activities for lands and infrastructure impacted by fires or fire suppression. The rehabilitation categorical exclusion has some limitations: the project area cannot exceed 4,200 acres and cannot include use of herbicides or pesticides or the construction of new permanent roads or other new permanent infrastructure. These CXs cannot be used in Wilderness Areas or for activities that impair the suitability of

WSAs for future preservation as Wilderness or for the construction of permanent roads or infrastructure. Emergency stabilization activities are not covered under this categorical exclusion. See BLM NEPA guidance for a decision template required when using the HFI CX.

Other BLM CXs (see 516 DM 11) may also be applicable to some ES&R activities. See BLM NEPA guidance for documenting decisions when using these CXs.

E. Documenting Decisions

ES&R decisions are subject to a 30-day appeal period during which implementation would be delayed [43 CFR 4.21(a)(1) and (2)], unless the decision was issued under Full Force and Effect authority. Decisions issued under Full Force and Effect authority are subject to appeal, but a stay must be requested and granted by the Interior Board of Land Appeals (IBLA) to cease implementation during the resolution period of the appeal. Potential concerns should be addressed early in the planning process to avoid appeals and subsequent delays.

ES&R decisions may be issued under Full Force and Effect authority allowing immediate implementation of treatments. Regulations allow BLM to make ES&R decisions effective immediately when it is determined that public lands are at immediate risk of erosion or other damage due to wildfire. The regulations can be found at 43 CFR 4190 for rangelands and 43 CFR 5000 for forested lands. Also see Full Force and Effect Decision Authority section.

V. Monitoring, Evaluation, and Reporting

Monitoring is required on all Emergency Stabilization and Rehabilitation plans. The level of monitoring required for ES&R projects will be commensurate with the complexity of the project, level of concern, and the objectives in the plan.

Monitoring and evaluation to determine the effectiveness of ES&R treatments is funded for up to three years following containment of a wildfire. Monitoring using ES&R funding can only be used to assess treatment implementation and effectiveness and can not be used to study the effects of fire on soils, vegetation, water, or wildlife. As examples:

1) Log erosion barriers are used to reduce erosion. A study site may be placed in a stream using ES&R funds to measure the amount of materials entering the stream.

2) A fire burned through spotted owl habitat. ES&R funds may NOT be used to see what impacts the fire has had on spotted owls.

A. Monitoring and Evaluation

The first step in developing an effective monitoring program is to develop objectives that are measurable, include a time frame, and are realistic for the ES&R treatments implemented. These objectives should address requirements for soil stability, establishment of seeded species, invasive species control, etc. Adjacent unburned areas may be used as the reference for setting

the standard for attainment of an objective as long as it is on the same ecological site as the treatment monitoring plot. This approach provides for setting realistic objectives that takes into consideration climatic influences on the treatment area in comparison to the non-treated area. All ES&R plans should include objectives that are specific enough that appropriate monitoring studies can be used to determine if the objectives are met.

ES&R monitoring funds are limited to determining if the treatment:

1. Is needed (e.g., field assessments for invasive plants);
2. Was implemented as specified in the ES or BAR plan;
3. Was effective. (Did the treatment meet the goals and objectives of the ES or BAR Plan?)

ES&R funding is not appropriate to monitor for:

- The impacts or effects of the fire (e.g., water quality monitoring to evaluate the impacts of the burn on post-fire recovery of an endangered aquatic species; post-fire monitoring of threatened and endangered species presence, reproductive status, or reproductive success, etc.).

- Long-term monitoring (> 3 years following containment of the fire) related to treatment longevity and effectiveness and the plant community dynamics of the project. This type of monitoring is appropriate for the Joint Fire Science Program, National Fire Plan, or base funding.

Monitoring and evaluation to determine the effectiveness of treatments is funded for up to three years following containment of the fire. Funding for the second and third year of monitoring requires the submittal of the Monitoring Summary Report and Funding Request Form (Accomplishment Report) to report on success/failure of treatments during the first and second years.

Monitoring priority should be given to those areas where unique treatments were implemented or where resource values or public concerns are high. Reference areas or control plots may be needed to support validity of treatment objectives and to detect changes between untreated (natural revegetation, untreated watersheds, etc.) and treated (planting and seeding, treated watersheds, etc.) areas. Use existing monitoring sites if possible.

Effective monitoring methods should be used (e.g., Sampling Vegetation Attributes Technical Reference TR-1734-4, or Herrick, J.E., et al, 2005, Monitoring Manual for Grassland, Shrubland, and Savanna Ecosystems). Future monitoring methods are being developed. Once developed, BLM will adopt these methods as the standard for monitoring and data storage. Photographs are strongly encouraged at all monitoring sites. Cooperative efforts in monitoring ES&R projects are encouraged; these efforts could be with other BLM Programs, research organizations, neighboring offices, agencies, or universities. Monitoring information and results should be retained in a central location in at least one permanent retention file. Information gained in monitoring is strongly encouraged to be shared through professional papers, technical bulletins, symposia, workshops, etc.

Contracting with a university [i.e., Cooperative Ecosystem Studies Units (CESU)] or private organization/company to conduct monitoring is an appropriate use of emergency stabilization funds. However, as noted above, standardized protocols in monitoring should be used to insure data comparability, consistency, and share-ability.

B. Reporting

1. Data Tracking

All ES&R projects must be entered into the National Fire Plan Operations and Reporting System (NFPORS) or its replacement. Financial information and units of accomplishment must be entered into the MIS/FBMS tracking systems.

Other tracking systems may be developed for use in the ES&R program, such as the Nevada Pilot Project which was begun in 1999 for the purpose of tracking seed and other ES&R treatments. This project is currently being tested on a limited basis.

All completed ES&R projects shall be entered into the Rangeland Improvement Project System (RIPS) or its replacement.

2. Annual Accomplishment Report

The Departmental Manual (620 DM 3.7K and 3.8K) requires the submission of an annual accomplishment report on success/failure of treatments in order to continue treatment or monitoring funding into the second and third years. This reporting is accomplished using the current BLM template (Accomplishment Report).

3. Closeout Report (End of Project Report)

At the end of the three-year lifecycle of an ES&R project, a Closeout Report using the current template listing all funds expended, success or failure of treatments, and lessons learned must be turned in to the State and National ES&R Program Leads. These reports should be written as professionally/accurately as possible and will be posted on an Interagency Web page (per request from the Government Accountability Office).

Glossary of Terms and Acronyms

Following are the acronyms and definitions for terms used in this Handbook or useful in understanding closely associated programs.

Terms

-A-

Activities – Activities are tasks such as monitoring, plan writing, or administrative functions.

Agency Administrator – The line manager having direct organizational responsibility for management of an administrative unit. May include Director, State Director, District Manager or Field Office Manager.

Assessment (Burned Area Assessment) – Burned area assessments are conducted to validate anticipated emergency stabilization or rehabilitation needs either defined in fire and resource management plans or identified in initial fact finding activities and determine what realistic and cost effective emergency stabilization and rehabilitation treatments are needed. Assessments are not to be used to document the effects of the fire or to validate whether an appropriate management response (e.g. limited or modified suppression) was appropriate.

-B-

Burned Area Emergency Response Plan (BAER Plan) – An emergency stabilization plan that involves multiple agency ownership or on large complex wildfires where preparation of a plan is beyond the capability of the local staff and values-at-risk are extremely high.

Burned Area Emergency Response Team (BAER Team) – A standing or ad hoc group of technical specialists (hydrologists, rangeland management specialists, biologists, soil scientists, etc.) that is assigned to prepare a BAER Plan. A BAER Team may be requested through the Incident Command System (ICS) prior to wildfire control or later through the appropriate line management decision process.

Burned Area Rehabilitation (BAR) – Efforts undertaken within three years of containment of a wildfire to repair or improve fire-damaged lands unlikely to recover naturally to management approved conditions, or to repair or replace minor facilities damaged by fire.

Burned Area Rehabilitation Plan – A site-specific document that identifies non-emergency treatments and activities to be carried out within three years following containment of a wildfire needed to repair or improve fire-damaged lands unlikely to recover naturally to management approved conditions, or to repair or replace minor facilities damaged by the fire.

Burn Severity – Refers to the change in watershed relating to the severity of effects on soil hydrologic function, mapped as high, moderate, low, and unburned. Also, reflects on a broader sense the effects of a fire on the environment, with an emphasis on what is left with regards to environmental characteristics after the fire.

-C-

Cultivar – A seed-producing plant type that may or may not be improved by selection and propagation of individuals for certain traits, or desired, superior characteristics such as early flowering or taller flower stalks. A cultivar may have been altered by focused plant breeding. A cultivar may be either particularly desirable selections from populations of a single species, or hybrids between species. For the purpose of seed certification, a cultivar is synonymous with a variety.

-D-

Departmental Manual – The Department of the Interior Manual for the ES&R Programs is found in Series: Public Lands, Part 620: Wildland Fire Management, Chapter 3: Burned Area Emergency Stabilization and Rehabilitation (620 DM 3).

-E-

Ecosystem Management – The careful, skillful use of ecological, economic, social, and managerial principles in managing ecosystems to produce, restore, or sustain ecosystem integrity and desired conditions, while providing products and services over the long term.

Emergency Stabilization (ES) – Planned actions to stabilize and prevent unacceptable degradation to natural and cultural resources, to minimize threats to life or property resulting from the effects of a fire, or to repair/replace/construct physical improvements necessary to prevent degradation of land or resources. Emergency stabilization actions must be taken within one year following containment of a wildfire.

Emergency Stabilization Plan – A site-specific document that specifies treatments required to implement post-fire emergency stabilization policies.

Emergency Stabilization and Rehabilitation Team (ES&R Team) – A group of technical specialists (hydrologists, rangeland management specialists, biologists, soil scientists, etc.) assigned to prepare an ES Plan and/or BAR Plan. An ES&R Team is usually made up of local specialists but may also include ES&R specialists from other offices when assistance is needed.

Exotic Species – Plants or animals not naturally occurring, either presently or historically, in an ecosystem. Sometimes referred to as non-native species.

-F-

Fire Containment – Established once a fuel break around a fire has been completed. This break may include natural barriers or manually/mechanically constructed line.

Fire Control – The complete extinguishment of a fire, including spot fires. Fireline has been strengthened so that flare-ups from within the perimeter of the fire will not break through the line.

Fire Intensity – Describes the fire characteristics, referring to the effects of temperature, flame length, rate of spread, heat of combustion, size of the fuels consumed, and the energy produced. A general term relating to the heat energy released by a fire.

Fire Management Plan (FMP) – A strategic plan that defines a program to manage wildland and prescribed fires and documents the Fire Management Program in the approved land use plan. The plan is supplemented by operational plans such as preparedness plans, preplanned dispatch plans, prescribed fire plans, prevention plans, and BAR Plans.

Fire Regime Current Condition Class – A qualitative measure classified into three classes describing the relative degree of departure from historical fire regimes, possibly resulting in alterations of key ecosystem components such as species composition, structural stage, stand age, canopy closure, and fuel loadings.

Fire Regime Groups – A classification of fire regimes into a discrete number of categories based on frequency and severity. The national, coarse-scale classification of fire regime groups commonly used includes five groups: I - frequent (0-35 years), low severity; II - frequent (0-35 years), stand replacement severity; III - 35-100+ years, mixed severity; IV - 35-100+ years, stand replacement severity; and V - 200+ years, stand replacement severity.

Fire Severity – Refers to the effects of temperature, moisture content of the litter and fuels on the ground, heat of combustion of conductive/radiant heat affecting the soil and plants. It is dependent upon the intensity and residence of the burn. An intense fire may not necessarily be severe. For trees, severity is often measured as a percentage of basal area removed.

Fire Suppression Activity Damage – Damage to resources, lands, and facilities resulting from wildfire suppression actions, in contrast to damages resulting from a wildfire.

Fire Use – The combination of wildland use and prescribed fire applications to meet resource objectives.

Fuel – Combustible material, including vegetation, such as grass, leaves, ground litter, plants, shrubs and trees that feed a fire.

Fuel Loading – The amount of fuel present expressed quantitatively in terms of weight of fuel per unit area.

Fuel Moisture – The quantity of moisture in fuel expressed as a percentage of the weight when thoroughly dried at 212 degrees Fahrenheit.

Fuel Reduction – Manipulation, including combustion, or removal of fuels to reduce the likelihood of ignition and/or to lessen potential damage and resistance to wild fire control.

Fuel Type – An identifiable association of fuel elements of a distinctive plant species, form, size, arrangement or other characteristics that will cause a predictable rate of fire spread or difficulty of control under specified weather conditions.

-H-

Hybrids – Occur when two species from the same genus cross. They may be created artificially or naturally in the wild where the ranges of two closely related species overlap.

-I-

Incident – A human-caused or natural occurrence, such as a wildfire, that requires emergency service action to prevent or reduce the loss of life or damage to property or natural resources.

Incident Command System (ICS) – The combination of facilities, equipment, personnel, procedure and communications operating within a common organizational structure, with responsibility for the management of assigned resources to effectively accomplish stated objectives pertaining to an incident.

Interior Burned Area Emergency Response Group (IBAER) – The IBAER is a subcommittee of the NBAER (see below) consisting of the National ES&R/BAER Coordinators for the Bureau of Land Management (BLM), Bureau of Indian Affairs (BIA), National Park Service (NPS), U.S. Fish and Wildlife Service (USFWS), and a representative of the Department of the Interior (DOI).

Introduced Species – A species that is established in a natural ecosystem in which it was not historically present.

Invasive Species – Species which become established and reproduce rapidly, often displacing native species. Can be aggressive native species, but are usually non-native species. However, not all non-native species are invasive. Such species become invasive when they cause problems with their new environment, drastically changing the ecology and landscape. When native plants are displaced, animals that depend on them suffer.

-J-

Joint Fire Science Program (JFSP) – A partnership of six federal wildland and fire and research organization established in 1998 to provide scientific information and support for fuel and fire management programs. The emphasis is on a scientist-manager partnership with transferring research findings to the field. In 2001, post-fire rehabilitation and stabilization research efforts were added. Focus is on short-term applied research that provides information to managers.

-M-

Monitoring – Sets goals for comparisons to be made, thresholds for changes to be detected and proposed actions that would be undertaken in the event thresholds are met for any item of interest being monitored. Monitoring is not an inventory which is repeated over time. A monitoring measure is established to answer questions. Standardized protocols are the preferred method to be used in collecting monitoring data. Specific monitoring questions are developed to ensure that monitoring and evaluation address the needs essential to measuring plan accomplishments and effectiveness. Such questions help identify issues of concern and reveal how they are changing. The evaluation process determines whether the observed changes are consistent with the plan's desired conditions, goals, or objectives, and what adjustments may be needed.

-N-

National Burned Area Emergency Response Coordinators Group (NBAER) – The NBAER is a Chartered organization consisting of the Department of the Interior (DOI) National BAER Coordinators (BLM, BIA, NPS, USFWS) and the USDA Forest Service National BAER Coordinator.

National Environmental Policy Act (NEPA) – The basic national charter for protection of the environment, enacted in 1969. It sets policy and procedures for environmental protection and authorizes Environmental Impact Statements and Environmental Assessments to be used as analytical tools to help federal managers make decisions.

Native plant species – A plant native to a specific region, where it grows naturally and where it evolved. Native plants are often noted as those which were present prior to the time of European settlement.

Naturalized – When a species that is not native to a certain area grows, reproduces and maintains itself without any assistance from human activities.

National Wildfire Coordinating Group (NWCG) – A group formed under the Secretaries of Agriculture and Interior and comprised of representatives of the U. S. Forest Service, Bureau of Land Management, Bureau of Indian Affairs, National Park Service, U. S. Fish and Wildlife Service and Association of State Foresters. The group's purpose is to facilitate coordination and effectiveness of the wildland fire activities and provide a forum to discuss, recommend action and resolve issues and problems of substantive nature. NWCG is the certifying body for all courses in the National Fire Curriculum.

Non-native plant – A plant that is accidentally or intentionally distributed outside of its historic range. A non-native plant is sometimes termed an exotic or introduced species.

Non-native, invasive plant species – Plants that live outside of their historic range, usually originating from human settings and activities (gardens, agricultural lands, roadways, etc.), and that continue to reproduce and displace native species, reducing biodiversity in natural areas.

Invasive plants, being free from herbivores and parasites which keep them in check in their native range, reproduce rapidly.

-O-

Original Source (Provenance) – The location of the native plant from which seed was collected.

-P-

Prescribed Fire – Any fire ignited by management actions under certain, pre-determined conditions to meet specific objectives related to hazardous fuels or habitat improvement. A written, approved prescribed fire plan must exist, and NEPA requirements must be met, prior to ignition.

Prescribed Fire Plan (Burn Plan) – This document provides the prescribed fire burn boss information needed to implement an individual prescribed fire project.

Programmatic Emergency Stabilization & Rehabilitation Plan (PESRP) – A programmatic plan (prepared in advance and applicable to clearly defined types of incidents and situations) generally written by a field office unit at the landscape level, documented and analyzed through the appropriate NEPA process. These programmatic plans contain information about those areas where wildfires are most likely to occur, and where and what type of ES&R treatments are typically needed.

-R-

Rehabilitation – See Burned Area Rehabilitation.

Rehabilitation Plan – See Burned Area Rehabilitation Plan.

Remote Automated Weather Stations (RAWS) – An apparatus that automatically acquires, processes, and stores local weather data for later transmission to the GOES Satellite, from which the data is re-transmitted to an earth-receiving station for use in the National Fire Danger Rating System.

Resources – 1) Personnel, equipment, services and supplies available, or potentially available, for assignment to incidents, 2) The natural resources of an area, such as timber, grass, watershed values, recreation values and wildlife habitat.

Resource Advisor – A technical specialist appointed by the Agency Administrator and provides advice to the Incident Management Team on natural and cultural resource protection from wildfire and suppression operations. This position is also the liaison between the Incident Commander and the Agency Administrator and provides input required for the development of ES&R Plans. See NFES 1831/PMS 313 “Resource Advisor’s Guide for Wildland Fire” for additional duties of this position.

Restoration – The continuation of rehabilitation beyond the initial three years or the repair or replacement of major facilities damaged by the fire (620 DM 3.3 N). Restoration activities must be funded through sources other than the ES&R subactivities.

-S-

Source Identified Seed – A seed that has been verified through Seed Certification as to the species, origin and seed collection location of a plant ecotype or accession.

Suppression – A management action intended to protect identified values from a fire, extinguish a fire, or alter a fire's direction of spread.

Sustainability – The ability of an ecosystem to maintain ecological processes and functions, biological diversity, and productivity over time.

-T-

Treatments – Efforts which result in on-the-ground projects such as aerial seeding, drill seeding, culvert installation, weed spraying, etc.

-V-

Values-at-risk (Values to be protected) – Includes property, structures, physical improvements, natural and cultural resources, community infrastructure, and economic, environmental, and social values.

-W-

Watershed Response – A measure of how a watershed will respond to precipitation, based on soils moisture, cover, impermeable surface (rocks), hydrophobic soils, amount/ duration of precipitation, lag time from the start of the storm to peak discharge, etc.

Water Repellency – The resistance to soil wettability, which can be increased by intense fires.

Weed – Any plant that interferes with human activities and is not valued where it is growing. Where they displace native plants and animals, in effect decreasing biodiversity, a weed can be considered an invasive plant species.

Wildland Fire – Any non-structure fire that occurs in the wildland. Three distinct types of wildland fire have been defined and include wildfire, wildland fire use, and prescribed fire.

- **Wildfire –** An unplanned and unwanted wildland fire including unauthorized human-caused fires, escaped wildland fire use events, escaped prescribed fire projects, and all other wildland fires where the objective is to put the fire out. If fire suppression action is needed beyond initial attack, a Wildland Fire Situation Analysis (WFSA) is prepared to guide suppression efforts.

- **Wildland Fire Use** – The application of the Appropriate Management Response to naturally- ignited wildland fires to accomplish specific resource management objectives in predefined designated areas outlined in Fire Management Plans. A Wildland Fire Implementation Plan (WFIP) is prepared to guide operational management.
- **Prescribed Fire** – Any fire ignited by management actions to meet specific objectives.

Wildland Fire Leadership Council – Made up of the heads of the five agencies responsible for wildland fire management (BIA, BLM, NPS, USFS, and USFWS) chaired by alternating DOI or DOA Assistant Secretaries

Acronyms
(See Glossary of Terms for additional Acronyms and their definition)

BAER Burned Area Emergency Response
BAR Burned Area Rehabilitation
BIA Bureau of Indian Affairs
BLM Bureau of Land Management

CFR Code of Federal Regulations
CX Categorical Exclusion

DOA Department of Agriculture
DOI Department of the Interior
DM Departmental Manual
DNA Documentation of NEPA Adequacy

EA Environmental Assessment
ES Emergency Stabilization
ES&R Emergency Stabilization and Rehabilitation

FAR Federal Acquisition Regulations
FMP Fire Management Plan
FOR Fixed Ownership Rates

IBAER Interior Burned Area Emergency Response Committee
IBLA Interior Board of Land Appeals
IDIQ Indefinite Delivery, Indefinite Quantity (a contract)
IT Information Technology (computers, etc)
LUP Land Use Plan (includes RMPs and MFPs)

MFP Management Framework Plan

NBAER National Burned Area Emergency Response Committee
NFP National Fire Plan (includes Ten-Year Comprehensive Strategy)

NEPA National Environmental Policy Act
NFPORS National Fire Plan Operations and Reporting System
NIFC National Interagency Fire Center
NLCS National Landscape Conservation System
NPS National Park Service
NRCS National Resource Conservation Service

OH&A Office of Hearings and Appeals
OWFC Office of Wildland Fire Coordination

PESRP Programmatic Emergency Stabilization & Rehabilitation Plan

RAWS Remote Automated Weather Station
RIPS Rangeland Improvement Project System (a computer database)
RMP Resource Management Plan

USFS United States Forest Service
USFWS United States Fish and Wildlife Service

WFLC Wildland Fire Leadership Council
WO Washington Office (Headquarters Office of BLM)
WSA Wilderness Study Areas

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APPENDIX 1 – CHECKLIST OF PRINCIPLE STEPS

Pre-Planning Phase

Step 1 – Prepare/review Programmatic ES&R Plan (PESRP) for the planning unit, with associated NEPA analysis documentation. Complete any needed consultations under the Endangered Species Act and the National Historic Preservation Act.
Step 2 – Insure PESRP is incorporated appropriately into unit's Fire Management Plan (FMP).

** It may also be helpful to have a pre-season meeting to anticipate needs for the upcoming fire season, identify potential ES&R personnel, and review current ES&R policy.

Planning Phase

Step 1 - While fire is still burning, assign a Resource Advisor (RA) to work with Suppression personnel.
Step 2 - Begin gathering pertinent information available from the Suppression Team (values at risk, GIS files, maps, burn severity, etc.).
Step 3 - Assemble an ES&R Plan ID Team with a team leader (Resource Advisor should be on the team) and determine if ES or BAR Treatments are required.
Step 4 - Assemble and review existing planning information (LUP, FMP, PESRP, and Biological Opinions, etc.).
Step 5 - Conduct a field assessment of the burn area to analyze ES or BAR Treatment needs.
Step 6 - Prepare and submit an Initial ES and/or BAR Plan (Form 1310-20- with continuation sheet). (Note: Form 1310-20 is required for both ES (2822) and BAR (2881) by BC-612)
Step 7 - Develop Objectives for the burned area based upon LUP guidance.
Step 8 - Write up treatment specifications with estimated costs.
Step 9 - Prepare a Complete ES (and/or BAR) Plan and submit for approval.
Step 10 - Enter the data into NFPORS and MIS/FBMS.
Step 11 - Assign an Implementation Team Leader (and Team if necessary).

Implementation Phase

Step 1 - Prepare or assemble any necessary contracts and arrange for certified COR(s) and PI(s) to administer the contracts.
Step 2 - Order any necessary materials (seed, seeding equipment, fence materials, etc.) and arrange for specific delivery dates and locations to meet implementation needs.
Step 3 - Secure commitments for any necessary in-house labor and equipment needs with time frames specified.
Step 4 - Put treatments on the ground or assure they are completed by contractors.
Step 5 - Pay all bills or assure they are paid by the Contracting Officer.
Step 6 - Enter all projects into RIPS, all accomplishments into MIS/FBMS and NFPORS. Prepare the first year Monitoring and Completion report and request funding for the next FY.
Step 7 - Prepare an Administrative File with all pertinent Plan information and documentation included. If contracts, etc. are housed within other files, make copies for the Administrative File and include them or at least reference where they are housed for future reference.
Step 8 - Assure Monitoring is scheduled with a responsible party.

Monitoring/Reporting Phase

Step 1 – Project Lead assures adequate monitoring is completed, analyzed and included in the Administrative File.
Step 2 - ID Team determines future ES or BAR needs, requests appropriate funding and assigns responsibility for these actions to a responsible person/group for completion.
Step 3 - Complete a Monitoring and Completion report for years two and three with year three being the closeout report for the project.
Step 4 – Update NFPORS data entry.

APPENDIX 2 – SAMPLE PESRP/EA OUTLINE

I. INTRODUCTION
- A. PURPOSE AND NEED
- B. CONFORMANCE WITH LAND USE PLANS AND OTHER RELATED PLANS

II. PROPOSED ACTION AND ALTERNATIVES
- A. ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED ANALYSIS
- B. NO ACTION ALTERNATIVE
- C. PROPOSED ACTION
  1. *Emergency Stabilization and Rehabilitation*
     - a. Natural Recovery
     - b. Seeding and Planting
     - c. Noxious and Invasive Weed Treatments
     - d. Erosion Control
     - e. Protective Fences
     - f. Closures
     - g. Repair/Replace Minor Facilities Essential to Public Health and Safety
     - h. Livestock and Wild Horse Management
     - i. Cultural Site Protection, Stabilization, and Repair
  2. *Specific Design Features for Sensitive Resources*
     - a. SSS Plants
     - b. SSS Terrestrial Wildlife
     - c. SSS Aquatic Wildlife
     - d. Riparian, Wetland, and Aquatic Habitats
     - e. Special Management Areas
     - f. Cultural Resources
  3. *Monitoring*

III. AFFECTED ENVIRONMENT
- A. SOILS
- B. WATER
- C. FLOODPLAINS/WETLANDS/RIPARIAN ZONES
- D. AIR
- E. VEGETATION
  1. *General Vegetation*
  2. *Special Status Plants*
     - a. Slickspot Peppergrass
     - b. Other Sensitive Plants
- F. TERRESTRIAL WILDLIFE
  1. *General Terrestrial Wildlife*
     - a. Pronghorn Antelope
     - b. Mule Deer and Elk
     - c. Migratory Birds
     - d. Sagebrush Obligate Birds
     - e. Other Terrestrial Wildlife

2. Special Status Terrestrial Wildlife
a. Type 1 Federally Threatened, Endangered, and Candidate Species
b. Type 2 Rangewide/Globally Imperiled Species
c. Type 3 Regional/State Imperiled Species

G. AQUATIC WILDLIFE
1. General Aquatic Wildlife
a. Coldwater Fishes
b. Warmwater Fishes
2. Special Status Aquatic Wildlife
a. Type 1 Federally Threatened, Endangered, and Candidate Species
b. Type 2 Rangewide/Globally Imperiled Species

H. RECREATION
I. SPECIAL MANAGEMENT AREAS
1. Wilderness Study Areas
2. Wild and Scenic Rivers
3. Other Special Management Areas
J. VISUAL RESOURCES
K. CULTURAL RESOURCES
L. GRAZING MANAGEMENT

IV. ENVIRONMENTAL CONSEQUENCES
A. NO ACTION ALTERNATIVE
B. PROPOSED ACTION
1. Soils
2. Water
3. Floodplains/Wetlands/Riparian Zones
4. Air
5. Vegetation
a. General Vegetation
b. Special Status Plants
6. Terrestrial Wildlife
a. General Terrestrial Wildlife
b. Special Status Terrestrial Wildlife
7. Aquatic Wildlife
a. General Aquatic Wildlife
b. Special Status Aquatic Wildlife
8. Recreation
9. Special Management Areas
10. Visual Resources
11. Cultural Resources
12. Grazing Management
C. CUMULATIVE IMPACTS

V. COORDINATION, CONSULTATION, AND PUBLIC INVOLVEMENT

VI. LIST OF PREPARERS

VII. REFERENCES

VIII. LIST OF ACRONYMS

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APPENDIX 3 – NATIONAL BAER TEAM DISPATCH PRIORITIZATION CRITERIA

The use of a National Burned Area Emergency Response (BAER) Team is generally employed for a wildfire that involves multiple agency ownership or on large complex wildfires. A team of interagency specialists is brought in to assess the impacts of the fire and prepare a BAER Plan for emergency stabilization treatments. **Prior to requesting a BAER Team, the National BAER Team Dispatch Prioritization Criteria, shown in the table below, must be reviewed and mutually agreed upon with the National ES&R Program Lead.** A BAER team must be requested through the Incident Command System (ICS) prior to wildfire control or later through the appropriate line management decision process. See National Interagency Mobilization Guide Chapter 60, Section 69.4 at: http://www.nifc.gov/news/mobguide/index.html.

Question	Criteria	Points	
1	Does ordering land unit have the ability (lacking needed resources) to produce their own BAER Plan with local or regional assistance? If yes, instruct the unit to undertake plan development. Stop here; there is no need to complete this table. If no, complete the table below.	Yes/No	
2	Post-fire impacts pose immediate and significant threats to human life and property.	10	
	Post-fire impacts pose moderate threats to human life and property.	5	
	Post-fire impacts pose minor threats to human life and property.	1	
3	There are numerous emergency stabilization issues, fire damage assessments are difficult and require special skills not available at the local unit.	3	
	There are several emergency stabilization issues, fire damage assessments are difficult and require special skill not available at the local unit.	2	
	There are few emergency stabilization issues, fire damage assessments are routine and require some simple skills not available at the local unit	1	
4	BAER planning will involve multiple Federal/Tribal/State jurisdictions.	3	
	BAER planning will involve two Federal/Tribal/State jurisdictions.	2	
	BAER planning will involve one DOI bureau.	1	
		Total Points	

Point Score	**Recommended Action**
3-7	National Interagency BAER Team dispatch not appropriate at this level.
8-11	Consider using other local or regional resources.
12-16	Priority dispatch of National Interagency BAER Team.

APPENDIX 4 –EXPENDITURE GUIDANCE FOR ES&R FUNDS

When preparing Emergency Stabilization Plans and Burned Area Rehabilitation Plans it is important to understand which subactivity is the correct funding source so the treatment can be included in the appropriate plan. **The following lists provide a quick reference to some of the allowable or prohibited uses of ES&R funds. Actual policies are described in further detail in the ES&R Handbook (H-1742-1).**

Allowable Emergency Stabilization Treatments and Activities

- Installing (i.e. signs), replacing or repairing minor facilities essential to public health and safety when no other protection options are available.
- Placing structures to slow soil and water movement.
- Seeding to prevent unacceptable erosion of soils.
- Planting/seeding of shrubs, grasses, and forbs for the purpose of preventing permanent impairment of designated Critical Habitat for Federal and State listed, proposed or candidate threatened and endangered species.
- Road or trail work to increase drainage structure frequency and/or capacity to handle additional post-fire runoff.
- Installing protective fences or barriers to protect treated or recovering burned areas.
- Conducting assessments of critical habitat (ESA section 7) and significant heritage sites (NHPA section 106) in those areas that may be affected by emergency stabilization treatments.
- Stabilizing critical heritage resources to prevent further post-fire damage.
- Patrolling, camouflaging, or burying significant heritage sites to prevent looting.
- Seeding to prevent establishment of invasive plants.
- Using IPM techniques to minimize the establishment of non-native invasive species within the burned area, when there is an existing approved management plan that addresses non-native invasive species.
- Direct treatment of invasive species for up to one year from fire containment.
- Monitoring of treatments and activities for up to three years from fire containment.
- Overtime for fire preparedness (2810) funded employees (not base eight) when working on emergency stabilization projects.
- Base eight and overtime for fuels (2823, 2824) funded employees when working on emergency stabilization projects.
- Base eight and overtime for non- fire program funds (i.e., MLR, O&C, etc.) employees when working on emergency stabilization projects.

Allowable Rehabilitation Treatments and Activities

- Chemical, manual, biological, and mechanical removal of invasive species for up to three years from fire containment.
- Planting/seeding of shrubs for the purpose of reestablishing diversity in vegetative structure, vegetation recovery to pre-fire shrub condition, and wildlife habitat recovery.
- Tree planting to reestablish burned habitat, reestablish native tree species lost in fire, prevent establishment of invasive plants.

- Repair or replace minor operating facilities (e.g., fences, campgrounds, interpretive signs and exhibits, shade shelters, wildlife guzzlers, etc.).
- Awards for exceptional performance in the ES&R Program.
- Base eight and overtime for fire preparedness (2810) funded employees when working on rehabilitation projects.
- Base eight and overtime for fuels (2823, 2824) funded employees when working on rehabilitation projects.
- Base eight and overtime for non- fire program funds (i.e., MLR, O&C, etc.) employees when working on rehabilitation projects.

Prohibited Uses of ES&R Funds

- Emergency stabilization or rehabilitation treatments not in an approved ES&R Plan or Plan Amendment.
- The expenditure of funds for emergency stabilization treatments carried out beyond one year following containment of the fire (except for treatment failures; see Treatment Failure section of ES&R Handbook).
- Use of emergency stabilization funding for planting/seeding of shrubs, grasses, and forbs for the purpose of providing diversity in vegetative structure or wildlife habitat recovery.
- Expenditure of ES&R funding on non-federal lands (except where the Wyden Amendment applies; see Wyden Amendment section in ES&R Handbook).
- Monitoring to determine the short- or long-term response of a resource to the fire (i.e., fire effects monitoring).
- The expenditure of any ES&R funds beyond three years of the date of fire containment.
- Monitoring the effects of the fire on cultural resources.
- Monitoring the post-fire recovery of vegetation and wildlife, absent any treatments.
- Seeding at rates and methods that have not been proven to be effective in documented research and monitoring.
- The planning or replacement of major infrastructure, such as visitor centers, residential structures, administration offices, work centers, vehicle bridges, and similar facilities.
- The construction of new facilities that did not exist before the fire (except for temporary and minor facilities necessary for public safety or to implement ES&R treatments).
- Treatments to address effects to resources caused by prescribed fires or wildland fire use fires (unless the wildland fire use or prescribed fire is declared a wildfire).
- Extensive cultural resource field surveys of burned areas or documentation of cultural resource inventories not associated with NHPA section 106 compliance.
- Site and data recovery, cataloging, and other programmatic actions such as determination of National Historic Register eligibility not associated with NHPA section 106 compliance.
- Cultural resource or heritage site restoration.
- Treating fuels within the burned area to accomplish fuel management objectives.
- Treatments to address or resolve a pre-fire existing problem (see Preexisting Condition section in ES&R Handbook).
- Conducting cadastral survey work to resolve pre-fire ownership issues.

- Restoration, the funding of activities beyond the initial three years or the repair or replacement of major facilities (e.g., visitor, centers, residential structures, administration offices, work centers or similar facilities and their contents) damaged by the fire.
- Purchase of accountable/capitalized equipment (i.e., laptop computers, cameras, drills, snowmobiles, GPS units, OHVs, etc.) without National ES&R Program Lead approval and documentation that purchasing the equipment is more cost effective than leasing/renting equipment and is in the best interest of the government.
- Base-eight salary of employees funded with fire preparedness funds (i.e., 2810) engaged in emergency stabilization actions.
- Awards using emergency stabilization funding.
- Research.
- Normally scheduled road maintenance or improving a road to better than pre-fire conditions.
- Repair of wildfire suppression activity damage.