

# BUREAU OF LAND MANAGEMENT'S COMMENTS ON THE RESTORE NATIVE ECOSYSTEMS ALTERNATIVE, Version 1 June 14, 2002

## RESTORE NATIVE ECOSYSTEMS ALTERNATIVE: OVERVIEW

### GOAL-OVR 1

Ecological integrity of BLM lands will be enhanced by restoring natural processes, native species, ecosystem function, and resiliency of plant and animal communities (Overview Note 1). Ecological integrity is the ability of an ecosystem to support and maintain a balanced, adaptive community of organisms having a species composition, diversity, and functional organization comparable to that of natural habitats within the region.

The first sentence is a foregone conclusion and reflects BLM Policy. The second sentence is a definition.

BLM Policy states: "The BLM will manage the public lands to sustain ecological processes and functions in order to provide resilience to short-term stress and adaptation to long-term change. We will conserve, maintain, and restore the ecological integrity of the land and provide for human values, products, and services within the ecological limits of sustainability". ". [Ecosystem Management in the BLM: From Concept to Commitment](#) 1994

"Work to minimize and repair impacts to the land - *Land-disturbing management activities on the public lands such as grazing, mining, timber harvest, right-of-way developments, and some recreation activities will be conducted in a manner that minimizes ecosystem fragmentation and degradation and maintains ecological health and diversity of the land. All management activities will include rehabilitation provisions that safeguard the long-term diversity and integrity of the land*". [Ecosystem Management in the BLM: From Concept to Commitment](#) 1994

We are not analyzing alternative management strategies in this EIS. In other words, there is no proposal before us to do anything other than work towards enhancing ecological integrity of BLM lands through restoring the processes described. This goal, therefore, has nothing to analyze in comparison to or other alternatives to choose among unless this is a citizen proposal for BLM to ignore its mandates under FLPMA and other laws to: NOT provide for human values, products and services within the ecological limits of sustainability. In this case, the Goal would be contrary to law and policy and rejected as an alternative to analyze. Recommending or proposing changes in law and policy are outside the scope of this EIS analysis.

### Objective-OVR 1: [Proportionality](#)

Allocate roughly equal proportion of effort and commitments (e.g., funding, staff time) to: [Allocation of funding and staff are not within the scope of this EIS.](#)

1. Prevention of conditions that favor vegetation problems.
2. Treatment of vegetation problems.
3. Restoration of ecological integrity on sites that have been treated (Overview Note 2).

[Prevention, Treatment, Restoration, as well as Monitoring, are all components of the BLM Proposed Action which will be analyzed in the EIS.](#)

### Objective-OVR 2: [Best science](#)

Base the restoration of native ecosystems on the best available science and knowledge.

Redundant with BLM Policy: "Gather and use the best available scientific information as the cornerstone for resource allocations and other land management decisions – *The BLM will use scientific information (including biological, physical, economic, and social) research, new technologies, and the results of monitoring to determine appropriate local, landscape, and regional management strategies...prioritize*

*restoration of degraded public lands...develop methodologies and technologies to restore impaired ecosystems". [Ecosystem Management in the BLM: From Concept to Commitment](#) 1994 See also [Blue Print for the Future](#), 1995 for more detail.*

#### Standard-OVR 1

Provide documentation of cases where previous application of proposed restoration activity has resulted in achievement of restoration goals. Assess the likelihood of activities contributing to long-term ecological integrity. BLM has a commitment to adaptive management which requires constant monitoring and assessment of successful and unsuccessful practices. Part of this assessment process entails case documentation, information sharing, technology transfer and use of the internet to communicate "success stories" and failures so resource specialists can implement sound practices and avoid activities which are not likely to be successful. If case information is available and germane, it would be summarized in the project plan NEPA documentation at the project level. The purpose of this EIS is to analyze the general environmental impacts of certain types and methods of physical treatments. The ultimate application of any particular method or treatment addressed in this EIS, and ultimately its success in achieving restoration goals as outlined in a land use plan, can only be done at the local scale.

#### Standard-OVR 2

If treatment has not previously been attempted, cite scientific evidence that the treatment could be expected to achieve its goals.

This ignores the contribution of research which may not be fully supported by existing scientific evidence. Development of a specific treatment not previously attempted would already include a NEPA component which would address success or achievement of goals.

#### Objective-OVR 3: [Accountability](#)

State goals, objectives, standards and guidelines in clear, measurable terms, then measure the outcomes of restoration activities, so that activities and users can be held accountable to the goals.

Goals, standards and objectives are outlined in land use plans. "Objectives identify specific desired conditions for resources...have established timeframes for achievement and are usually quantifiable and measurable". See [H-1601-1 Land Use Planning Handbook](#) 2000 for further detail.

For any restoration activities, restoration project designs are developed within the parameters and constraints imposed by the land use plan. It is unclear what is meant by "activities and users can be held accountable to the goals". What activities and which "users"? All permitted activities and uses are required to be in conformance with the goals, standards, objectives, and any guidelines, outlined in the land use plan.

Overall, this is not an analyzable issue for this EIS.

#### Objective-OVR 4: [Caution](#)

Perform restoration carefully and with humility, recognizing that ecosystems are complex and our understanding of them and the consequences of our activities are limited.

Performing restoration with "humility" is subjective and not analyzable. BLM recognizes the complexity of ecosystems and has developed a [BLM Science Strategy](#) (2000) to better focus efforts in research and understanding.

#### Objective-OVR 5: [Assessment and Monitoring](#)

In budgets and plans, include realistic and dedicated funding for, and an institutional commitment to, assessment, monitoring and appropriate response to monitoring results and new information. Design assessment and monitoring systems and have them in place before activities commence. BLM has an institutional commitment to assessment, monitoring and appropriate response to monitoring results and new information (adaptive management). This is communicated in the BLM Maintaining Healthy Ecosystems strategic goal: Restore and maintain the health of the land. See [Blue Print for the Future](#), 1995.

Budget development and funding for project development, assessments, monitoring and adaptive management are outside the scope of this EIS analysis.

#### Objective-OVR 6: Public Participation

Encourage and facilitate public participation by local, regional and national stakeholders in such activities as assessment, monitoring, early detection of invading species, provision of new and scientific information, review of assessment and monitoring protocols, and selection of alternatives for actions. Public participation by local, regional and national stakeholders is built into all BLM NEPA and land use planning processes cf. NEPA, FLPMA, 43 CFR 1600, H-1601-1;

Also, “early detection of invading species” is built into the seven goals (Prevention and Detection; Education and Awareness; Inventory; Planning; IWM; Coordination, Monitoring, Evaluation, Research and Technology Transfer) found in the [BLM Partners Against Weeds: An Action Plan for the Bureau of Land Management](#) January 1996.

As public participation is inherent in the process to select alternatives for action i.e. NEPA, there is no issue to analyze here.

#### Objective-OVR 7: Incentives

Provide clear and significant incentives for prevention of vegetation problems and restoration of ecological integrity. Develop disincentives for activities that encourage vegetation problems and delay recovery of ecological integrity. It is unclear what “clear and significant” incentives would be without examples. BLM provides various types of incentives in many ways already. These range from annual environmental land stewardship awards to conservation groups, industry and private individuals to Departmental and Agency awards to field offices, managers and staff implementing innovative and successful stewardship programs and projects. Also, budgetary incentives are provided through various grant programs such as the Fish and Wildlife Foundation and others. Disincentives include cancellation of permits and authorizations and reductions in program budgets not meeting specific goals. In other situations, PRPs (potentially responsible parties) are identified in cases of pollution and undue and unnecessary degradation and legal action pursued to recover natural resource damages.

This is not an analyzable issue for this EIS as incentives and disincentives are built into BLM programs already.

#### Objective-OVR 8: Economics

Ensure that restoration activities are financially accountable to the public, by relying on best available restoration and conservation science, providing "best value" for ecological integrity, avoiding treatments of symptoms that are likely to recur, and using local community workforces whenever feasible. BLM is financially accountable to Congress which represents the public and ultimately funds all BLM programs. This accountability takes the form of numerous reports, studies and summaries, produced annually at various levels of government from local to national.

BLM already has a commitment to use best science as referenced above. Avoiding treatments of symptoms that are likely to recur would require this determination be based on science and adaptive management.

It is unclear what “providing ‘best value’ for ecological integrity means, however, the FAR (Federal Acquisition Regulations) which BLM uses to contract, were re-vamped in the early 1990’s under Former Vice-President Al Gore’s Reinvention of Government Initiative. The FAR require all federal agencies use “best value” in determining contract award. There is no longer a “low bid” contract award system.

Local community workforces are used when possible and as appropriate, and is mandated under various provisions of Congressional allocations to BLM programs, including fuels reduction work. The 2001 Title 4 appropriations specifically stated the use of contracts with local communities. This is also a goal of the current administration’s “citizen-centered” government to “outsource” with local communities.

This issue is not analyzable in this EIS as there is no proposal in contrast to compare against or other alternatives to choose among which would not contain accountability to Congress and the public or in contrast to the FAR and other Administrative and Congressional mandates to contract locally.

#### Overview Notes

1. Vegetation (and thus ecosystem) problems on BLM lands in sixteen western U.S. states include fragmentation; simplified ecosystems; invasive exotic species; altered fire regimes; compacted and otherwise heavily-disturbed soils; and impaired watersheds, with disturbed upland and riparian systems. [These observations are well documented in the BLM policy documents cited above and provide the basis for the policy changes which have been undertaken since 1994.](#)

2. Because preventing future loss of ecosystem functioning and integrity is as important as remedying past negative trends, prevention should always be addressed alongside conservation and restoration. Management strategies will be grounded in a scientific approach that considers the full range of prevention, conservation, and restoration opportunities that are available. [See Ecosystem Management in the BLM: From Concept to Commitment 1994; Blue Print for the Future, 1995.](#)

CHAPTER 2  
DEFINITIONS OF TERMS USED IN THIS ALTERNATIVE

Active restoration	Intervention to restore ecological integrity.
Conservation	Protection of landscape, ecological, and native genetic diversity and the processes that maintain them.
Ecological integrity	The ability of an ecosystem to support and maintain a balanced, adaptive community of organisms having a species composition, diversity, and functional organization comparable to that of natural habitats within the region.
Goals	Goals are concise statements that describe a desired condition to be achieved sometime in the future. Goal statements are the principal basis from which objectives are developed.
Invasive Species	Exotic species shown by observation and/or scientific evidence to aggressively expand their occupancy of land, whether or not they are viewed as directly impacting economic activities, or have been listed on formal "noxious weed" lists. "Invasive species" does not include native species that increase in response to particular human activities (e.g., juniper, mesquite, sagebrush).
Objectives	Objectives describe the incremental progress expected to take place over a period of time to meet goals (desired conditions).
Passive restoration	Suspension of activities that cause the loss of ecological integrity or native species population.
Prevention	Detecting and ameliorating the conditions that cause or favor the presence of invasive species. Prevention is not limited to prevention of the <i>introduction</i> of invasive species.
Restoration	Restoring and maintaining ecological integrity.
Standards	Standards are limitations placed on management activities to ensure compliance with applicable laws and regulations or to limit the discretion authority in project decision-making. Standards are limited to those actions that are within the authority and ability of the agency to meet or enforce. Compliance with relevant standards is mandatory.
Wildlands-Urban Interface	A 20 - 60 meter (66-200 feet) intensive treatment zone that may include public and private lands where fires most directly threaten structures and human life. Defensible space should be created within an additional intensive treatment zone up to 1/8 mile, which includes the 60 meter homesite treatment zone, for fire fighter safety. Depending on site-specific circumstances (e.g. slope, vegetation, prevailing winds), an "extensive" treatment zone may be justified up to 1/8 mile. Actions that are within the authority and ability of the agency to meet or enforce. <a href="#">This is a narrowly defined structure protection definition and is not accepted among fire management agencies for describing Wildland Urban Interface. Wildland Urban Interface is a general term to describe the inter-relationships of interface condition, intermix condition, occluded condition and rural condition and is based on densities of structures within a geographic area and their relationship to fuels.</a>

CHAPTER 3  
PREVENTION, CONSERVATION, AND RESTORATION:  
ASSESSMENT AND ACTIVITIES

GOAL-PCR 1

Vegetation treatments are based on assessments of the condition of vegetation; major human causes of degraded conditions of the vegetation; opportunities for prevention of conditions favoring soil disturbance and vegetation problems; opportunities for conservation of native vegetation; likelihood for success of options for restoration; and results of past restoration activities. **This is a foregone conclusion and built into BLM policy as discussed previously.**

Objective-PCR 1

The BLM will "not authorize, fund, or carry out actions that it believes are likely to cause or promote the introduction or spread of invasive species" (Executive Order 13112).

**This sentence is incomplete, out of context and is extremely misleading in this context. This sentence is only part of paragraph 3 (Sec. 2) of E.O. 13112**

Section 2 states: "(a) each federal agency whose actions may affect the status of invasive species shall, to the extent practicable and permitted by law;

- (1) identify such actions; (2) ... (i) prevent the introduction of invasive species, (ii) detect and rapidly respond to and control populations of such species... (iii) monitor invasive species populations... (iv) provide for the restoration of native species and habitat conditions in ecosystems which have been invaded; (v) conduct research on invasive species and develop technologies to prevent introduction and provide sound control of invasive species; and (vi) promote public education on invasive species and the means to address them.

BLM has complied with (1). All elements (2) are incorporated into the BLM Partners Against Weeds Action Plan which is designed to fulfill these goals. These are also built into the National Invasive Species Plan developed as a result of this E.O.

Paragraph 3 states: "not authorize, fund, or carry out such actions that it believes are likely to cause or promote the introduction or spread of invasive species *in the United States or elsewhere* [emphasis added] *unless, pursuant to guidelines that it has prescribed, the agency has determined and made public its determination that the benefits of such actions clearly outweigh the potential harm caused by invasive species; and that all feasible and prudent measures to minimize risk of harm will be taken in conjunction with these actions.*

What this means is that no agency shall intentionally introduce a species in the U.S. or another country (which had not existed prior) unless the benefits and risks are weighed in a public forum. This might include such actions as introducing a new biocontrol agent or importing another species to address some management situation related to invasives. An example would be the introduction brown snakes on Guam, frogs in Australia, etc. where ecological disasters resulted from the introduction of one species to control another species.

Paragraph 2 is the key paragraph that addresses federal agency management of invasive species that are already present in the U.S. and these mandates are being followed by the agency.

The E.O. requires invasives to be detected and controlled where found (ii). The E.O. does not reference the detailed management assessment and review, prior to taking direct action.

There are no proposals in this EIS to introduce invasive species to the U.S. or elsewhere, thus there is nothing to analyze. If there were proposals to do such, the E.O. would be complied with. Further, it is impossible for BLM as an agency to subscribe to this interpretation of the E.O. or even analyze it as a valid "objective" as it is completely out of context and misleading. In the context it is used, it

ignores BLM's compliance with paragraph (2) and attempts to illegally coerce the agency to suspend legitimate public land uses through misinterpretation, to imply the agency cannot authorize any activities such as livestock grazing, OHVs, if they have the potential to spread weeds or invasive species.

As such PCR-1, as an incomplete statement and out of context would be rejected, relying on the fact that the Agency is already complying with the E.O. per paragraph 2 and is meeting its responsibilities.

#### Objective-PCR 2

Prepare a landscape (ecoregion) restoration assessment of BLM holdings in the sixteen western states. This task is outside the scope of this EIS to complete. BLM is already working towards regional and landscape assessments for local and regional planning. The EIS will address vegetation by ecoregions, however, a landscape assessment based on ecoregions is not necessary to analyze vegetation treatment methods.

#### Standard-PCR 1

Map within the ecoregion:

1. key areas of high ecosystem integrity and native vegetation; areas of mixed native and exotic vegetation and condition; and areas of low integrity
2. habitat conditions for habitat-obligate terrestrial and aquatic wildlife species
3. habitat of wide-ranging species (e.g., bull trout and sage grouse) that require use of extensive or temporally diverse (e.g., winter/summer habitat) areas within the ecoregion
4. hotspots of plant and wildlife biodiversity
5. habitats "at risk" of further fragmentation or degradation
6. areas where restoration will increase potential for habitat connectivity
7. areas that could benefit from improved management or restoration to maintain or enhance ecological integrity.

These are actions "BLM would like to do" and are in fact areas outlined through the assessment process to focus when mapping ecoregions, or more relevantly, watersheds and subwatersheds.

#### Standard-PCR 2

Identify within the ecoregion the spatial and temporal association of particular vegetation problems with the spatial and temporal occurrence of past and continuing human activities.

#### Objective-PCR 3

Prior to implementing site-specific restoration activities, prepare watershed and subwatershed goals based on assessment of watershed and subwatershed:

1. vegetation conditions
2. vulnerable wildlife and plant species and habitats within the watershed and subwatersheds
3. habitat important for threatened, endangered, and sensitive species and carnivores; connectivity for habitat-obligate wildlife
4. major past and present activities within the watershed leading to vegetation problems
5. restoration needs, both for passive and active restoration
6. feasible restoration goals.

In the cases where watershed and subwatershed assessments are being completed, these actions are typically undertaken as part of the assessment process outlined in H-4180-1 Rangeland Health Standards and done in conjunction with land use planning. This does not preclude the initiation of restoration activities in the absence of watershed assessments. There is substantial anecdotal data which field offices may rely on to initiate restoration activities.

Standard-PCR 3

Using existing data initially, prepare a map of invasive exotic species concentrations within each watershed and subwatershed. Identify and prioritize through existing data all significant information gaps. Improve and update the map every two years.

The BLM has established a National Center for Invasive Species in Bozeman, MT. One of its chartered goals is to provide such products as they can be coordinated. The National Science and Technology Center in Denver also provides this type of data. Each state is undertaking inventories and are at varying levels of implementation. It is outside the scope of this EIS to establish such a dataset at this level of detail. Currently, BLM inventory cycle is every three years.

Standard-PCR 4

Prepare a map of exotic species plantings on BLM lands, and, when available, adjacent private and public lands. Preparing a map of this detail is outside the scope of this programmatic EIS. BLM may eventually develop this dataset.

Guideline-PCR 1

Offer simple invasive exotic species identification/reporting forms to BLM lands visitors in order to encourage the reporting of locations in which particular invasive species are present

This is already outlined in the BLM PAW action plan and implemented in most states, particularly in conjunction with University Coop Extension service programs.

Objective-PCR 4

Maintain at a central site for the 16 western states an analysis of the conditions and activities that prevent, minimize, or reverse (as well as facilitate) the introduction, establishment, spread, and reinvasion of specific invasive exotic plant species (e.g., cheatgrass, ventanata, starthistle) throughout the 16 western states.

See above, BLM has established a National Invasive Species Center in Bozeman, MT. Sixteen states is actually too limiting. The National goal is to have a National database including the areas administered by Eastern States which is not part of this EIS.

Standard-PCR 5

Incorporate findings of the analysis in all site-specific activity planning.

See above discussions. BLM is already committed to adaptive management and the use of best science.

Standard-PCR 6

Conservation will prioritize protection of:

1. areas of high ecological integrity
2. areas of key ecological connectivity (e.g. wildlife corridors, intact forest)
3. rare, unique, and vulnerable habitats
4. habitats for threatened, endangered and sensitive species.
5. roadless areas

The focus of this EIS is on vegetation treatment methods that promote restoration and conservation. This EIS is not to determine conservation priorities of protection. This is developed through local planning and may vary among states, regions or field offices depending on specific management objectives.

Objective-PCR 5

Prior to implementing a site-specific restoration activity:

1. candidly state the watershed goals served by the restoration project
2. identify and prioritize restoration activity options
3. identify the least intrusive/intensive methods that will effectively move the site toward ecological integrity.

This is accomplished through the assessment process outlined in H-4180-1. Watershed goals are set through the land use plan. Project analysis evaluates alternatives methods through the NEPA process.

#### Standard-PCR 7

Restoration activities will prioritize, as feasible, and based on scientific evidence of efficacy:

1. cessation of activities that have been demonstrated to impede natural recovery (i.e., passive restoration)
2. active restoration projects that incorporate passive restoration
3. active restoration to restore ecological integrity.

Integrated Weed Management and other projects which propose restoration activities may consider any or all of these to achieve its management objectives.

#### Standard-PCR 8

Restoration activities will utilize

1. A thoughtful, careful, and precautionary approach (this is subjective and does not lend itself to analysis, however, this is built into project development)
2. Best available science and experiential and indigenous conservation and restoration knowledge where applicable (as outlined above, BLM is committed to using best available science and use of local knowledge and experience is outlined in several handbooks, including the Emergency Fire Rehabilitation and Rangeland Health Standards handbooks previously cited.
3. An adaptive and public process that regularly incorporates revisions from monitoring and evaluation (as outlined above, adaptive management is a key process adopted by BLM)
4. The least intrusive techniques available to restore ecological integrity
5. The least risky interventions that are likely to provide the greatest ecological benefit (4 and 5 are management calls made at the local level through analysis of alternative methods of treatment on a site-specific basis)
6. Recovery plans for threatened and endangered species, or improvements on such plans (recovery plans and improvements are routinely considered in restoration activities. To not do so would violate ESA.
7. Prevention strategies to reduce the need for treatments, so that the number of acres treated annually declines over the life of the EIS. (Prevention is a key component of the BLM Proposed Action as outlined above. BLM is particularly interested in reducing the amount of Active Ingredient put on public lands based on success of treatments, as well as reduce the amount of fuels treatments based on the success of reintroducing fire into fire-adapted ecosystems.

#### Standard-PCR 9

Passive restoration may include:

1. Area and road and ORV route closures
2. Voluntary livestock permit retirement
3. Retirement of vacant livestock allotments
4. Livestock grazing exclosures (e.g., in aggressive weed infestations, uplands “at risk” of weed infestation, riparian areas, TES habitat, springs, wetlands)
5. Restrictions of logging activities.
6. Restrictions of oil and gas and mineral development, including allowing expired leases to remain expired.
7. Restrictions on other human activities.

(1) this is not a vegetation treatment, this is transportation planning and outside the scope of this EIS analysis (2, 3) this is accomplished through the livestock permitting process and is outside the scope of this EIS (4) this is a BMP, (5,6) these are land use allocations and outside the scope of this EIS (7) this is vague and open-ended. Any restrictions would have to be determined on a site specific basis through an assessment process to determine what and why certain other human uses would need to be restricted.

#### Standard-PCR 10

Active restoration may include

1. Road and ORV route removal (this is not a vegetation treatment and would only be done through planning. Temporary closures would be on an emergency basis through the Federal Register for the duration of time it takes to recover the area)
2. Culvert removal (culverts are erosion control devices, therefore, these would only be removed based on planning to allow removal of roads. This is not within the scope of this EIS.)
3. Prescribed burning
4. Fuels reduction/thinning in wildlands-urban interface areas
5. Invasive exotic species treatments
6. Fish and wildlife habitat rehabilitation
7. Reintroduction of extirpated species (this is not necessarily a vegetation treatment but a vegetation objective developed through the planning process.)
8. Planting and care of native seeds and plants
9. Reintroduction of soil biota required by native species, when necessary
10. Reconnection of flood plains with streams (this is outside the scope of this EIS)
11. Restoration of well pads and associated roads after wells have been capped. (outside the scope of this EIS)
12. Other necessary activities based on priorities established in the ecological restoration assessment.

#### Standard-PCR 11

Herbicide treatments will be of lower priority than non-chemical treatments. This is already policy under the PAW Action Plan Goal 1. “Priority 1: Take actions to prevent or minimize the need for vegetation control when and where feasible considering the management objectives for the site. Priority 2: Use effective nonchemical methods of vegetation control when and where feasible. Priority 3: use herbicides after considering the effectiveness of all potential methods or in combination with other methods or controls”.

Also policy under Departmental Manual 517 DM 1.1 Pesticides “To use pesticides only after full consideration of alternatives – based on competent analyses of environmental effects, safety, specificity, effectiveness, and costs. The full range of alternatives including chemical, biological, and physical methods, and no action will be considered. When it is determined a pesticide must be used in order to meet important management goals, the least hazardous material that will meet such goals will be chosen”.

They will be used only in conjunction with elimination or reduction of the conditions that have favored the presence of invasive species, and will be followed by restoration of the site that has been treated with herbicides (Prevention, Conservation and Restoration Note 1). Herbicides are used through an integrated weed management approach that may incorporate other management actions and include a restoration component.

#### Objective-PCR 6

State for all site-specific restoration projects and activities:

1. measurable conservation and restoration objectives
2. specific indicators and measures for determining results
3. timelines for analysis of whether goals, objectives and standards have been met
4. decision making processes that will be used to respond to analysis of results.

As previously outlined, the BLM process for setting objectives, conducting assessments, and implementing adaptive management already includes these provisions

#### Objective-PCR 7

Establish processes that provide incentives for prevention and restoration.

See above earlier discussion on incentives.

#### Standard-PCR 12

Establish annual awards to BLM employees and Districts for accomplishments such as:

1. successful restoration of native vegetation
2. establishment throughout a District of proportional efforts in prevention, treatment, and restoration
3. exemplary monitoring
4. significant involvement of NGOs, students, and other volunteers in conservation and restoration activities on BLM lands.

See above earlier discussion on incentives.

#### Standard-PCR 13

Eliminate funding based on acres treated the previous year without documented connections to (a) alteration of the conditions that favored the presence of the vegetation that was treated and (b) restoration programs to restore the treated site to native vegetation. [Budgetary and funding allocation processes are not within the scope of this EIS.](#)

#### Standard-PCR 14

Develop and maintain a central web site featuring passive restoration, active restoration, and prevention, including:

1. scientific literature on restoration and prevention outcomes of relevance to BLM lands
2. BLM projects that have resulted in reestablishment of native vegetation, reintroduction of extirpated species, increase in sensitive species populations, reduction in acres needing vegetation treatment, reestablishment of natural fire regimes
3. successful BLM arrangements to alter activities that have facilitated the introduction, establishment and spread of invasive species.

[BLM has established a National Center for Invasive Species in Bozeman MT. This goal is among its many objectives. Establishing a website clearinghouse is not within the scope of analysis of this EIS. BLM is working towards these actions, however, it will still be a several year effort of dedicated work to coordinate and maintain. This is part of technology transfer which BLM is already engaged in on multiple scales. There is nothing to analyze here.](#)

#### Prevention, Conservation, and Restoration Notes

1. This standard is essential, as herbicides can have numerous adverse toxic effects on workers; nearby residents; beneficial soil organisms; native plant, aquatic, terrestrial and avian species; can simplify the vegetation community; and can render the treated site more vulnerable to return of invasive species. Herbicides alone do not address the conditions that favor the introduction, establishment and spread of invasive species, and yet they are often used as stand-alone technological “fixes.”

[The purpose of this EIS is to disclose toxic effects to workers, the public, organisms, soils, and terrestrial and aquatic species. BLM recognizes that herbicides alone do not address the conditions that favor introduction, etc. That is the reason BLM adopts and promotes an IWM program which may include other management actions.](#)

[To claim that BLM only uses herbicides as “stand alone technological fixes” ignores everything that is set in BLM policy that leads to the eventual use of herbicides and is purely a perception issue, not reflective of the careful consideration the agency gives to undertaking vegetation treatment projects which utilize herbicides. Herbicides are too expensive, with potentially serious environmental impacts, to be placing on public lands without careful thought and planning. To make this statement, the authors would need to provide documentation that past and present herbicide treatments did not go through an analysis process or be subject to consideration of alternative methods. In the absence of such documentation, the agency relies on the implementation of its policies.](#)



## CHAPTER 4 FIRE MANAGEMENT

### GOAL-FIRE 1

Natural fire regimes and native vegetation types will be restored.

The EIS proposes to analyse impacts of vegetation treatments that are designed to reintroduce fire into fire adapted ecosystems. Restoration on native vegetation types for any area is guided by the objectives outlined in that area's land use plan objectives and these may vary regionally or by landscape. In some cases, the desired future vegetation objectives may not necessarily be what is considered "native" for a particular area. In other cases, restoring natural fire regimes may not always be appropriate, for instance, stand replacement fires would not be appropriate adjacent to Wildland Urban Interface areas or in remnant vegetation patches that serve as habitat for "at risk" species. This is one of the reasons local land use planning serves to identify local objectives which are appropriate for the area.

In cases where restoration of native vegetation is a stated objective of the land use plan, the determination of native vegetation types presupposes some indication of what "native" is for any particular area, which requires detailed study and is beyond the scope of this EIS. It is not within the stated objectives of this EIS to make determinations of what are native vegetation types, identify where they are located and restore to them. This EIS is intended to analyse the methods and techniques that support conservation and restoration activities, however, those goals and objectives are set through local planning, not through this EIS.

See FR Vol. 67, No. 14 Tuesday, January 22, 2002 "...conduct public scoping meetings on BLM's use of [Emphasis added] prescribed burning, biological control, cultural practices, mechanical and chemical treatment of vegetation, including noxious weeds and other invasive species in public land management"

... "the variety of vegetation treatments BLM employs for the conservation and restoration of vegetation communities, watersheds, and wildlife habitats...and provide for long-term multiple uses (as specified in locally developed land use plans) [Emphasis added].

"The EIS is not a land use plan or a land use plan amendment".

### Objective-FIRE 1

Collect baseline data on natural fire regimes and plant and animal communities to use as a target for restoration activities.

BLM routinely collects baseline data on natural fire regimes, as well as plant and animal communities.

### Objective-FIRE 2

Base fire management on the 1995 Wildland Fire Policy and current science. As required by the Fire Policy, create Fire Management Plans for every burnable acre.

Fire management is based on the 1995 Wildland Fire Policy, the updated 2001 Wildland Fire Policy, the National Fire Plan and current science. Fire Management Planning for every burnable acre has been ongoing in an iterative process since 1996. Again, since there is nothing proposed other than to follow these policies, there are no alternative(s) to analyse or compare against, as this is common to all alternatives as a matter of policy.

### Standard-FIRE 1

Through an open process that fully includes the public and utilizes the best available science, develop Fire Management Plans that will:

1. allow certain remote wildland areas to burn under carefully prescribed conditions where ecological benefits would result
2. prescribe "Minimum Impact Suppression Tactics" where they would be most effective
3. prohibit aggressive soil-disturbing suppression methods (e.g. bulldozers in roadless areas, chemical retardants in riparian areas) where they would be damaging

4. determine ecological risks of fire – exotic species, population impacts - in all areas covered by plans, and carefully weigh benefits and risks as part of this process.

The fire management planning process is conducted through the NEPA process with public involvement. It is not the objective of this EIS to develop fire management plan(s) for every burnable acres. The “standards” suggested are developed at the local fire planning level and are outside of the scope of this EIS.

#### Standard-FIRE 2

Based on Fire Management Plans, use fire suppression to protect:

1. areas of high ecological values that may be at risk from exotic species invasion following fire
2. areas where human life, developed property or irreplaceable ecological values or cultural resources (e.g. rare forest types or a major portion of the population of an endangered species) are at stake
3. areas that should be protected until prescribed burning can reduce excess fuels.
- 4.

The fire management planning process is conducted through the NEPA process with public involvement and determines fire suppression priorities. It is not the objective of this EIS to develop fire management plan(s) or suppression priorities. It was stated in 19 scoping meetings that fire suppression activities are outside the scope of this EIS.

#### Standard-FIRE 3

Fire fighting will be prohibited on:

1. riparian reserves and steep slopes
2. areas where nearby natural fire barriers such as bodies of water or rocky ridges are likely to extinguish the fire
3. Wilderness Areas, Wilderness Study Areas, roadless areas/potential wilderness areas, Wild and Scenic Rivers, and Research Natural Areas, except when fire threatens to escape from these areas or permanently impair ecological or cultural values.

As stated, this EIS will not address fire suppression priorities. The examples provided here are not compatible with the 1995 and 2001 Fire Policies. Suppression priorities are determined on spread, fire behavior and adjacent resources, to name a few. As a note, while this Chapter sets out an objective to follow policies which are in place, it recommends actions which are not compatible with the policies, therefore contradicts itself.

#### Standard-FIRE 4

Minimize introduction of invasive species during fire suppression operations. Clean equipment of invasive species seeds before moving equipment off roads to build fire breaks.

Fire suppression activities are outside the scope of this EIS, however, where feasible i.e. non-emergency situations, this is a prevention measure already built into the fire program. For example, in 1998, over 128 fire vehicles mobilized to Florida from the West, were power-sprayed and cleaned prior to being loaded on trains to be returned to the West, to prevent exotic species introductions.

#### Objective-FIRE 3

Minimize disturbance to burned areas to allow natural recovery.

This is a BMP

#### Standard-FIRE 5

Burned areas (natural or prescribed) will be protected from livestock grazing for at least five years and until measurable recovery criteria are met.

This is a BMP. This would require a change in stated policy from the minimum of two growing seasons, however, this is also already within the discretionary authority of the authorized officer and the policy to extend the protections as long as needed to recover an area.

#### Standard-FIRE 6

Monitor all fire camps and helicopter spots for invasive species following fire.

This is a BMP, but again, fire suppression is outside the scope of this EIS.

#### Objective-FIRE 4

Use prescribed fire where ecologically appropriate to restore natural fire regimes and native ecosystem function, and only in concert with a restoration assessment with clearly defined restoration objectives; and where invasive species will not be increased.

This appears to constrain the use of prescribed fire to less than the accepted uses for this tool and as such would be outside of accepted policy.

For natural resource management, this is already practice. Prescribed fire is defined as: the application of fire, under specified conditions, in a designated area to achieve specific resource management objectives. [Prescribed Fire Handbook H-9214-1 2000](#). These management objectives are set out in the land use plan. (Note: objectives may not always be related to restoration of natural fire regimes, or native ecosystem function only). There are many objectives which can be accomplished with this tool and therefore do not always entail a mandatory restoration assessment with restoration objectives. For natural resource management, there is typically an intervening more specific activity plan which further refines into clearly defined objectives, the land use plan objective. This may be related to forb production, browse enhancement, watershed restoration, etc.

Prescribed fire is also used to reduce hazardous fuels, used in areas to mitigate threats to safety of employees and the public, used in areas where action will protect, enhance, restore and/or maintain plant communities, or sensitive plant and animal species and in areas that will reduce risks and damage from wildfire. This includes the reintroduction of fire into fire dependant ecosystems to maintain and enhance those ecosystems and as stated above, the modification of vegetation to achieve specific land management goals.

#### Standard-FIRE 7

Consideration of the following will be documented prior to prescribed burns:

1. long-term damage to microbiotic crusts
2. soil erosion through wind and runoff events
3. long-term loss of nutrients from already nutrient-deficient landscapes
4. loss of native species
5. loss of special status species habitat
6. risk of spread of invasive species
7. the levels of nuclear testing radionuclides in the immediate and adjacent area of the proposed burns
8. interrelation between prescribed burning projects on adjacent Federal/state lands
9. indigenous uses of plants that may be impacted.
10. impacts on air quality.

This is a good list of things to consider, but everything on it does not always apply to a specific project, nor is it a complete list. This is the type of information that would be identified through scoping and ID team input and analysed in the NEPA document associated with a specific prescribed burn plan. Most of these are documented in the Fire Effects Information System (FEIS) which is consulted in developing prescribed burn plans. Some of these issues have already been identified for consideration in the EIS on a programmatic basis, e.g. impacts on air quality (including radionuclide mobilization), invasive species, special status species, etc.

Standard-FIRE 8

Prescribed burning teams will:

1. use existing roads
2. limit ground disturbance
3. address risk of fire spreading beyond the project area and onto surrounding lands.

These are BMPs and already policy.

Objective-FIRE 5

Educate the public about the natural role of fire and protecting their homes from fire through the Fire Wise Program.

This is already being done, what is there to analyze here? There are no counter proposals to stop doing this. This was recently re-inforced on May 23, 2002, by the Secretary of Interior signing the Comprehensive Strategy for implementing the National Fire Plan.

## CHAPTER 5 FUELS TREATMENT

### GOAL-FUELS 1

Human lives and property will be protected in the wildlands urban interface and natural processes will be restored.

*Policy. There is nothing to analyze here.*

### Objective-FUELS 1

Fuels reduction funds under the National Fire Plan will be used:

1. only in the wildlands urban interface (as defined in the Definitions chapter) to protect lives and property in the wildlands-urban interface
2. for essential fire planning and preparedness to maximize the efficiency and effectiveness of fuels reduction

*Budgetary issues and use and allocation of funds are not within the scope of this EIS*

### Objective-FUELS 2

Protect lives and property in the wildlands-urban interface.

### Standard-FUELS 1

Distinguish between fuels treatments intended to restore ecological integrity and those primarily intended to protect property and human life.

*Fuels treatment objectives are identified in the NEPA document for the project.*

### Standard-FUELS 2

Intensive wildlands-urban interface treatments (thinning, pruning, and mowing of vegetation, roof cleaning, and replacement of flammable landscape and building materials) must be undertaken within 20 - 60 meters (66-200 feet) of structures. Structures on public or private lands that are threatened by fire on BLM lands will be protected. *Structure protection definition, not accepted as Wildland Urban Interface. Roof cleaning, replacement of flammable landscape and building materials are not within the purview of the federal agency to mandate or address. It is contrary to policy to mandate protection of structures. This is based on opportunity and fire fighter safety among other factors.*

### Standard-FUELS 3

Defensible space should be created within an additional intensive treatment zone up to 1/8 mile, which includes the 60 meter homesite treatment zone, for fire fighter safety.

*Not sufficient in all cases and is arbitrary.*

### Standard-FUELS 4

Depending on site-specific circumstances (e.g., slope, vegetation, prevailing winds), an "extensive" treatment zone may be justified, up to one-eighth mile.

*Not sufficient in all cases and is arbitrary.*

### Standard-FUELS 5

Fuels treatment in the extensive zone will focus on light thinning and brush removal in preparation for prescribed burning, while maintaining habitat components for wildlife wherever possible, including retention of fire-resilient large trees and snags.

*This does not account for risk and liability. Prescribed burns are not likely to be authorized within proximity to homes or WUI situations. Light thinning and brush removal may not be sufficient in and of itself and may require more intensive mechanical treatment or clearing depending on the situation.*

Standard-FUELS 6

Long-term maintenance activities of the wildlands-urban interface (i.e., prescribed burning, mechanical brush removal, etc.) as well as monitoring plans will be considered and a funding commitment secured before any action is undertaken.

Long term maintenance and monitoring are incorporated into the Proposed Action. Budgetary allocations are outside the scope of this EIS.

Guideline-FUELS 1

Management of the wildlands-urban interface zone will be a cooperative partnership between the Federal government and private sector. Cooperation will extend from the initial assessment to long-term maintenance, encouraging appropriate access to structures for fire fighting as well as fire resistant landscaping and construction standards for all land ownerships.

Narrow concept. Federal government also includes state, local and tribal partnerships, not just private sector. Is this proposing to reduce the amount of and types of cooperators the federal government should interact with?

Objective-FUELS 3

Fuels reduction to restore natural fire processes will be based on comprehensive restoration assessments with clearly defined objectives, in conjunction with other active or passive methods.

This does not address WUI situations which are not necessarily oriented towards restoration.

Standard-FUELS 7

Restoration priorities will be identified through a restoration assessment before any restoration fuels reduction activities take place.

Restoration assessment is redundant with all the other layers of existing planning which occurs prior to a project being implemented (Resource Management Planning, Fire Management Planning, sub-basin reviews, watershed assessments, project planning, etc.)

Standard-FUELS 8

Fuels reduction will:

1. minimize or avoid road construction and reconstruction (Policy)
2. avoid roadless areas, old growth, endangered species habitat, riparian areas, ecological sensitive areas and other areas of high ecological integrity
3. avoid habitat of threatened and endangered species.

These are absolute restrictions which may not always be appropriate based on science or resource need. In some cases, fuels reduction within sensitive habitats or old growth, riparian, etc. may be necessary to ensure their persistence and protection from catastrophic fire. The need is determined based on local situations and studies

Standard-FUELS 9

Fuels reduction will not:

1. increase motorized vehicle use or livestock access
2. supply biomass plants
3. chip material and leave it on the ground which increases fire risk and limits native plant recovery
4. include chaining.

In general, these are too prescriptive for the scope of this EIS. #1 is unclear. Fuels reduction is intended to reduce fuel loads. Motor vehicle use or livestock access are unrelated to reducing fuel loads and are dictated by allowable uses in the land use plan. #2 would require a change in policy and current mandates from Congress to utilize biomass by-products in an environmentally responsible and productive manner. Ground applied biomass has been shown to promote native plant recovery and does not necessarily increase fire risk.

#3 is would likewise require a change in policy and mandate from Congress. The ultimate disposition of biomass is decided through alternative analysis in the subject NEPA document. Rather than suggest avenues that are contrary to policy, there should be a positive indication on how to dispose of biomass through other means. By default it appears to suggest to either not do anything that would result in biomass, or stockpile it and/or burn it in place, which then enters into waste disposal or air quality issues, which may not always be acceptable.

#### Objective-FUELS 4

Use positive economic incentives that encourage ecologically based restoration activities and eliminate incentives that encourage activities that are ecologically degrading.

#### Standard-FUELS 10

Contracting methods for fuels reduction/thinning for WUI or restoration will be based on economic incentives that encourage ecologically based restoration activities and will not include:

- 1) Commercial timber sales
- 2) “Goods for Services” Stewardship Contracts
- 3) other economic incentives that encourage activities which are ecologically degrading.

These outside the scope of analysis. Congress clearly intends and mandates programs such as “Goods for Services” “Jobs in the Woods”, etc. To adopt these policies would require changes in policy and mandates from Congress through their appropriations legislation.

#### Standard-FUELS 11

All fuel reduction projects will be paid for by appropriated dollars and any material of commercial value will be sold in a separate contract and all revenues will be returned to the treasury.

As stated before, budgetary allocations and disposition of funds is outside the scope of analysis of this EIS. However, this also appears to contradict the standards cited above. Material of commercial value should be in a separate contract, but according to the standards above, there appears to be a bias towards no commercial uses of biomass or timber (as related to fuels reduction, thinning, etc. not commercial logging). It is not clear from this what is acceptable commercial value, just what is not acceptable, which is currently contrary to appropriations language from Congress.

#### Objective-FUELS 5

Following fire, all standing trees will be left for wildlife habitat, soil stability, and nutrient cycling.

Unclear: What is meant by Fire (Wildland or Prescribed?) A prescription to leave all standing trees may not be acceptable for risk and safety reasons.

#### Standard-FUELS 12

There will be no post-fire salvage logging except where necessary to maintain public safety.

Post-fire salvage logging is an acceptable practice to utilize commercially viable products on public lands as well as for risk and safety.

#### Summary:

Overall, there is little in the fire management and fuels management chapters to address. Most is either part of policy or requires major changes in policy and practice from Congress. Very little has to do with assessing the impacts of fuels reduction or using prescribed fire as a resource tool. As such, most of this is outside the scope of the EIS. The EIS is not intended to determine what will and will not be done with prescribed fire and fuels treatments. The EIS is intended to generally analyze the effects of these type of treatments on vegetation and vegetation types.

## CHAPTER 6 INVASIVE EXOTIC SPECIES

### GOAL-INV 1

The ecological impact of non-native invasive species will be minimized through conservation and restoration of native vegetation communities, watersheds and wildlife habitats.

### Objective-INV 1

Develop, with the input of knowledgeable scientists and citizens, a long-term (e.g., 100-year) plan for prevention and minimization of unwanted exotic vegetation within the planning area.

Long-term plan(s) for prevention and minimization of unwanted and exotic vegetation already exist. Cf. [Meeting the Invasive Species Challenge](#), National Invasive Species Council (NISC) Management Plan, 2001, (mandated by E.O. 13112), see also, [Partners Against Weeds](#), BLM Action Plan, 1996, [Pulling Together](#), National Strategy for Invasive Plant Management, FICMNEW (Federal Interagency Committee for Management of Noxious and Exotic Weeds), 1996. The NISC plan was developed in cooperation with knowledgeable scientists, departmental and agency experts, university experts, environmental and stakeholder groups (including American Lands Alliance) and citizens.

The provisions of these various plans are incorporated into all federal agency policies and programs guiding weed and invasive species management. It is not the purpose of this EIS to develop another long-term strategy or management plan in place of national plans and strategies that already exist.

### Standard-INV 1

The long term vegetation management plan for integrated agency action will include:

1. identification and amelioration of the *conditions* that cause or favor the introduction, establishment, and spread of invasive species
2. protection of intact ecosystems from invasions
3. preservation of or restoration of the natural historical disturbance regime
4. restoration of the native vegetation community, via seeding and planting, to increase resistance to invasion
5. active vegetation treatments to reduce invasive exotic species populations.

These are already inclusive in the various plans and strategies in existence.

### Objective-INV 2

Give priority to two facets of the control of invasive species as defined in Executive Order No. 13112, "Invasive Species":

1. Prevent the spread of invasive species from areas where they are present.
2. Restore native species and habitats to reduce the effects of invasive species and to prevent further invasions.

The E.O. is already incorporated into BLM analysis process and activity management.

### Objective-INV 3

Prevent, wherever possible, the conditions that favor introduction, establishment, and spread of invasive species. Develop and implement comprehensive, science-based protocols designed to prevent the spread of invasive species in relation to all activities on BLM lands that have been identified in the scientific literature as primary facilitators of the establishment and spread of invasive species, watershed degradation, and loss of native species.

See PAW Plan. Science based protocols already exist as prevention measures for all activities BLM is engaged in.

## CONDITIONS THAT FAVOR INVASIVE SPECIES

### 1. LIVESTOCK GRAZING

Out of Scope: It has already been established that this EIS will not address livestock grazing. However, some commentary is provided below to highlight the many areas where much of this is already taking place in current policies.

Objective-INV 4

Minimize the introduction, establishment, and spread of invasive species due to livestock grazing.

The Land Health Standards assessment process (Handbook 4180 –1) outlines the process to determine if standards are being met and then to determine what the causal factors are, if land health standards are not being met. If there is a causal relationship established through the assessment process, then actions relative to livestock grazing are proposed and implemented.

Standard-INV 2

Reduce spread of invasive weeds caused by domestic livestock grazing.

1. retire domestic livestock grazing permits wherever possible to prevent the spread of weeds (Field Office discretion to retire permits)
2. prioritize vegetation restoration activities for areas where domestic livestock grazing has been permanently ended (sounds nice, but not always practical. For example, livestock grazing has been closed in many areas due to Desert Tortoise listing and implementing the recovery plan, however, at the same token, disturbance resulting from vegetation treatments are likewise precluded in favor of Desert tortoise *status quo* to not disturb any more habitat than necessary. Thus a mandatory prioritization does not always, as recommended here, meet local management needs. Prioritization is at the field office discretion, so that flexibility in management exists to direct efforts where they are needed, taking into account local constraints and opportunities.
3. Manage livestock movement patterns to insure animals are not moving seeds of invasive species from infested to uninfested areas. BMP, See PAW plan p. 41
4. Manage livestock grazing to favor native species. BMP

Standard-INV 3

Conduct forage enhancement projects only if they incorporate ecological principles to encourage or promote only native species, and will not result in any net loss of native plant communities. Mostly a BMP. Second part would have to be developed as a national policy based on need, as it is counter to an active vegetation management program which implements goals and objectives (i.e desired future vegetation) contained in local land use plans.

## CONDITIONS THAT FAVOR INVASIVE SPECIES

### 2. ROADS AND ORVs

Section is out of Scope: It has already been established this EIS will not address OHV management.

Commentary provided below.

Objective-INV 5

Minimize invasive species introduction, establishment and spread due to road and ORV route construction, maintenance, and use.

BLM strives to minimize spread of weeds through road construction, maintenance and use through stipulations placed on use authorizations and working with local counties and others with road maintenance responsibilities. These are BMPs already in place.

Standard-INV 4

Develop detailed GIS map and database inventories depicting all system (authorized and constructed) and non-system (user-created) roads and routes.

Transportation planning occurs at the field level and in local land use planning. Detailed GIS maps are created as required to engage in transportation planning. It is beyond the scope and ability of this EIS to develop such a map for the Western United States.

Standard-INV 5

Road or ORV route reconstruction, and any consideration of adding existing or illegal user-created roads and ORV routes to the transportation system, will be preceded by NEPA analyses of their impacts, including potential to facilitate the spread of invasive species into unaffected native ecosystems.

Transportation planning is outside the scope of this EIS. It is already policy through Washington Office Instruction Memorandum to consider the potential of noxious weed spread in all NEPA documents, for all federal activities and actions, not just OHV planning.

Standard-INV 6

Limit motorized vehicle travel to designated routes that minimize the spread of invasive species.

Planning function: Outside the scope of this EIS.

Standard-INV 7

Implement measures that reduce the likelihood of weed seed dispersal, such as education of equipment operators, agency and contractor vehicle and equipment washing, recreational access restrictions, and seasonal restrictions to travel. Consider restricting road grading activities in areas with high populations of invasive species.

BMPs already implemented. BLM works closely with local counties and agencies with road maintenance and use responsibilities.

Standard-INV 8

Implement full area closures that prohibit all motorized travel on lands outside of designated and NEPA analyzed transportation system roads and ORV routes.

Planning function: Outside scope of EIS.

Standard-INV 9

Close or restrict motorized use of all non-essential system roads and ORV routes that are shown during weed management planning NEPA analysis to facilitate the spread of invasive species.

Planning function: Outside scope of EIS.

Standard-INV 10

Identify and designate for obliteration system and non-system roads and ORV routes that do not comply with native vegetation protection goals.

Planning function: Outside scope of EIS.

Standard-INV 11

Reclaim obliterated roads to native vegetation.

BMP. Typically, if a road is obliterated or reclaimed, it is reclaimed to standards set forth in the LUP or local management objectives.

Standard-INV 12

Utilize low-impact fire line construction methods and fully reclaim fire lines with native vegetation after fire emergency situations have ended, in order to prevent the spread of invasive species into the disturbed fire line corridors and to prevent the use of fire line corridors as illegal ORV travelways.

BMP already in place within fire management program on fire line construction. Emergency situations such as during a wildfire do not always lend themselves to “low impact” construction methods. Post-fire ESR program addresses fire line reclamation. If line is constructed for a prescribed fire, minimum tool methods and low impact methods are employed.

**CONDITIONS THAT FAVOR INVASIVE SPECIES**

**3. COMMERCIAL LOGGING**

Section is out of Scope: It has already been established that commercial logging or timber harvest would not be addressed in this EIS.

Objective-INV 6

Minimize the introduction, establishment, and spread of invasive species due to timber sales.

Standard-INV 13

Maintain old-growth vegetation communities as bulwarks of vegetational resistance to invasion; minimize disturbance of old-growth or late seral vegetation communities. Whenever possible, maintain intact forest canopies adjacent to areas where invasive species are abundant.

Standard-INV 14

Design and plan timber sales to prevent introduction, spread, and establishment of invasive species, including pathogens.

**CONDITIONS THAT FAVOR INVASIVE SPECIES**

**4. ALTERED HYDROLOGICAL FLOW REGIMES**

Section is out of Scope: EIS is not intended to address re-establishing or restoring altered flow regimes of streams and rivers.

Objective-INV 7

Minimize the introduction, establishment, and spread of invasive species due to altered flow regimes of rivers and streams.

Standard-INV 15

Prioritize treatments of riparian areas where restoration is likely to be successful; i.e., areas where the natural historic flow regime is extant.

Standard-INV 16

Restore native historical flow regimes whenever it is possible to do so.

**CONDITIONS THAT FAVOR INVASIVE SPECIES**

**5. USE OF EXOTIC SPECIES FOR REVEGETATION, FORAGE IMPROVEMENT, EROSION CONTROL, LANDSCAPING**

Objective-INV 8

Prohibit planting of exotic species.

“Exotic Species” needs definition. Most accepted usage combines this with an invasive component. See INV 18 below.

Standard-INV 17

Exotic species will not be utilized for restoration, habitat improvement, range improvement, or landscaping.

Standard-INV 18

Collaborate with federal, state, local and private land managers to reduce sale and planting of exotic invasive species. [PAW plan](#), [NISC plan](#).

Standard-INV 19

Include all invasive exotic species in weed education programs. Also include information about how these species are introduced to public lands. [PAW Plan](#), [NISC Plan](#)

Standard-INV 20

Following fire or other disturbances, reseeding will not be proposed unless it can be shown that natural regeneration is not likely. If analysis shows that reseeding is necessary, native species will be used unless they are not available. Certified weed-free seed will always be used. [BMPs](#) [ESR program](#), [BAER team evaluations make determinations whether seeding is necessary](#). Programs include the use of natives as available. Use of certified weed-free seed is a standard and has been for years and is stipulated in all seed purchase contracts. Each seed lot purchased is routinely tested by sampling and testing in a lab, and if found contaminated is returned to the source.

**CONDITIONS THAT FAVOR INVASIVE SPECIES**

**6. OIL, GAS, AND MINERAL EXPLORATION AND DEVELOPMENT**

[Section is out of scope. This EIS is not intended to address oil and gas management. Exposure scenarios for field workers and public from use of chemical herbicides in O&G ongoing maintenance activities will be addressed.](#)

Objective-INV 9

Minimize the introduction, establishment, and spread of invasive species due to oil, gas, and mineral exploration and development.

Objective-INV 10

Prohibit seismic exploration activities in sensitive species habitat, on biological crusts, on steep slopes, in areas with special status plant species, and on sensitive soils.

Standard-INV 21

In areas where seismic exploration activities are permitted best available technologies must be used (i.e. helicopter shot-hole technologies over the use of 65,000 pound thumper trucks).

Standard-INV 22

In areas where thumper trucks are permitted, require signed area motorized closures and full reclamation of seismic survey corridors, in order to prevent the use of such corridors as access avenues for illegal motorized access.

Objective-INV 11

Locate wells and associated roads and pipelines to avoid or minimize surface disturbance, including a prohibition of surface disturbing activities on slopes greater than 25%.

Standard-INV 23

Keep removal and disturbance of vegetation to a minimum through construction site management (e.g. using previously disturbed areas and existing easements, limiting equipment/materials storage and staging area sites etc.) on both individual well locations and within oil and gas project areas. [BMP, already employed](#).

Standard-INV 24

Vehicles, equipment, and machinery entering an oil and gas project area must receive a power wash prior to entering. [BMP, already employed.](#)

Standard-INV 25

Limit vehicular traffic to the running surface of roads and well locations as authorized in Application's for Permit to Drill (APD's) and Right of Ways (ROWs) thus prohibiting all traffic on two-tracks and trails near oil and gas well location and within oil and gas project areas.

Standard-INV 26

Require that all gravel and other surfacing materials used for the project are free of noxious weeds. [BMP, already employed](#)

Standard-INV 27

Approval of ADP must be contingent on the use of best available technologies and be consistent with the Standard Lease Term No. 6; (Lessee shall conduct operations in a manner that minimizes adverse impacts to the land, biological, visual, and other resources.); BLM Instruction Memorandum 92-67.

Standard-INV 28

Require the submission of an annual monitoring plan and removal of invasive species at or near any and all locations disturbed by oil and gas activities before granting approval of an APD.

Standard-INV 29

Prioritize non-chemical removal over chemical methods whenever possible.

Standard-INV 30

Complete a survey for any and all endangered, threatened, candidate, sensitive, or rare plant species prior to allowing any surface-disturbing activities involved with oil and gas exploration, development, and production activities.

Standard-INV 31

Prohibit oil and gas exploration, development, and production activities in areas with endangered, threatened, candidate, sensitive, or rare plant species

Objective-INV 12

Adopt a "No Net Loss" policy for all special status plant species.

Standard-INV 32

Restrict herbicide applications requiring that applications be kept at least 500 feet from known populations or individual endangered, threatened, candidate, sensitive, or rare plant species.

Objective-INV 13

Conduct comprehensive baseline soil surveys prior to authorizing seismic exploration and/or oil and gas development and production activities.

Standard-INV 33

Prohibit oil and gas exploration, development, and production activities in areas with sensitive soils.

Objective-INV 14

Each operator must submit a Surface Use Plan containing appropriate erosion control and revegetation measures with each APD request.

Objective-INV 15

Grading and landscaping will be used during and after construction activities are completed to minimize slopes and water bars will be installed on disturbed slopes in areas with unstable soils where seeding alone may not adequately control erosion.

Standard-INV 34

When completing authorized surface-disturbing activities salvage, adequately protect the integrity of, and subsequently replace the topsoil whenever possible.

Standard-INV 35

Upon the completion of the drilling phase require immediate reclamation of well pads using the soils originally removed during construction, of all portions of the pad that can be reclaimed.

Objective-INV 16

With each APD request the oil and gas operators must submit a Reclamation Plan that includes, but shall not be limited to:

1. identification of lands to be disturbed
2. detailed description of the baseline condition and resources on the land including existing uses, soil characteristics, topography, vegetative cover, productivity
3. methods to control erosion
4. plans to revegetate and restore the areas disturbed
5. measures that address steep slopes, sensitive soils, recontouring requirements, short-term seedbed preparation measures, seeding mixtures and methods, and long-term objectives
6. steps to be taken to comply with federal, state, and local environmental laws, regulations, and policies.

## **PRESERVATION AND PROTECTION OF BIOLOGICAL SOIL CRUSTS**

Objective-INV 17

Maintain biological soil crusts as a partial shield preventing establishment or spread of invasive exotic species (See Exotic Species Note 1). [BMP](#).

Standard-INV 36

Map and describe the presence and degradation of biological soil crusts at the ecoregion, watersheds, and subwatershed levels within the 16 western states. [Outside of scope of this EIS. EIS is not intended to provide this level of detailed map and assessment of biological crusts over such a broad area. The EIS would address the general impacts of certain treatment methods on biological crusts.](#)

Objective-INV 18

Prepare and implement a recovery plan for damaged biological soil crusts. [Outside of the scope of this EIS. Recovery plans are developed by FWS for listed species.](#)

Standard-INV 37

Monitor the condition of biological soil crusts in grassland and forest areas which have experienced various degrees of livestock and other disturbances, and in areas slated for recovery efforts. [This is not a vegetation treatment analysis issue.](#)

Standard-INV 38

Prohibit livestock grazing for at least five years following a fire. Return of livestock may be delayed past five years if significant recovery of the biological soil crust has not occurred. [This would require a policy change from the National level. Current policy is two growing seasons and is not necessarily tied to biological soil crust, but success of revegetation and stabilization of the site to produce sustainable vegetation. It is within the discretionary authority of the authorized officer to extend this the two year period for as long as it takes to re-establish vegetation.](#)

## OBJECTIVES AND STANDARDS RELATIVE TO TREATMENTS

### Objective-INV 19

Priority for treatment will be given to exotic plant invasions that have adverse ecological impacts to native plant communities, watersheds, and wildlife habitats. Treatments will be part of an over-all ecologically based restoration plan and may include:

1. Biological control
2. Cultural practices
3. Mechanical treatments
4. Chemical treatments

BLM IWM program includes all of these elements, however, it appears here the proposal is to eliminate use of fire as a treatment method. Also, is it intended to not include low impact manual methods?

### Standard-INV 39

Use biological control agents that have been approved and do not pose a threat to native species.

Already policy. Program is managed by Agricultural Research Service (ARS). Approval process for biological control agents is conducted through the national-level Technical Advisory Group (TAG) which includes all agencies. Approval process is rigorous testing program that typically takes about a decade to complete for each biological control agent. BLM does not utilize or introduce any biological control agent which has not been approved, and scientifically validated through this process.

### Standard-INV 40

Use cultural methods of weed management that have been identified as effective in restoring native vegetation in current scientific literature (e.g., use of properly timed fire, properly timed and managed goat grazing, mulching, hand pulling) and conduct operational research to develop new, effective cultural treatments. Part of IWM. This mentions methods which are excluded under the objective stated above.

### Standard-INV 41

Plant and seed appropriate native species to compete with exotic species. IWM

### Standard-INV 42

Use mechanical methods of weed management that have been identified as effective in restoring native vegetation in current scientific literature (e.g., mowing, spot fire (flamer), mastication, weed eaters, mulching, weed wrenches) and conduct operational research to develop new, effective mechanical treatments. IWM

### Standard-INV 43

Chemical treatments will use application methods that minimize exposure to people, wildlife, and native plants. Spot treatment methods will be preferred over broadcast methods. IWM, treatment method (spot v. broad) is determined at project planning. Spot treatments are effective for small infestations and are not necessarily effective for large infestations which require broader application methods. All chemical treatment methods are applied according to the label. Minimized exposure to people, wildlife and non-target native species is always the objective when using chemical herbicides.

### Standard-INV 44

Treatments that restore natural processes and naturally occurring biotic communities (based on previous experiments or operational use) are preferred over treatments without this kind of documentation. This is an opinion.

Standard-INV 45

Nonchemical methods, unless shown to be ineffective, are preferred over chemical methods. [See PAW plan and various Departmental and agency manuals.](#) [Already policy.](#)

Standard-INV 46

Treatments of small, incipient infestations have priority over treatment of large-scale infestations. Use seasonal employees to detect and treat small infestations. [Already policy to early detect and treat small incipient infestations.](#)

[Seasonal and permanent employees, as well as volunteers \(for non-chemical treatments\), are used in the IWM program.](#)

Standard-INV 47

Treatments will be appropriate to size of the proposed treatment area, its location, and the biology of the target invasive species. [Standard IWM.](#)

Objective-INV 20

Only herbicides that minimize adverse effects on environmental and human health, based on knowledge of all ingredients in the formulation, will be utilized for chemical control.

[Approved herbicides have gone through risk assessments.](#) [Already policy.](#)

Standard-INV 48

Select treatment areas based on ecological priorities for restoration rather than potential economic benefits.

Standard-INV 49

Sulfonylurea herbicides and other acetolactate synthase-inhibiting herbicides will not be used due to their demonstrated ability to damage off-site native and crop species.

[This would need more detail on why these should not be used, if they have gone through the risk assessment and approval process. This is could be considered within the context of a “limited use of herbicides alternative”.](#)

Objective-INV 21

Treatments within wilderness areas will be in compliance with the Wilderness Act.

[Policy.](#)

Standard-INV 50

Except for treatment of small infestations without motorized equipment, prescribe treatments within designated wilderness or wilderness study areas only after the spread of invasive species from outside these areas has been effectively halted. [This is not very practical and is irresponsible management of wilderness values. Policy is to treat infestations where they are found and to prevent their further spread \(See the E.O.\). Identifying an infestation \(small or large\) in a wilderness area and not treating it, effectively waiting until a “larger” problem is addressed outside of an administrative boundary, which may take years to control or eradicate, given there would be dedication of funding and effort for that period of time, would allow the infestations within the wilderness to spread and grow beyond an effectively treatable level. It also plays on only one scenario, assuming there is some sort of weed infestation adjacent to the Wilderness Area which is “causing” the infestations within and unless these sources are eliminated, the infestations within will continue.](#)

[Often, an infestation that occurs or establishes in a Wilderness area is brought in via means unrelated to adjacent landscapes or vegetation. For example, birds spread leafy spurge seeds, which may be located long distances from a new infestation; recreationists and wilderness visitors spread weeds which may originate from their own backyards in the towns they live in. Tamarisk is spread by wind and water and](#)

may come from many sources. Elk, a transient species, can pick up knapweed seeds on their fur and travel many miles potentially spreading seed heads such as is happening with Utah west desert squarrose knapweed infestation contributing to new infestations within Nevada PJ forests. The point is, weeds establish in many ways that are not necessarily related to the adjacency to an infestation.

#### Standard-INV 51

Any proposal that contemplates the use of motorized or mechanized actions within wilderness shall include a "minimum requirements analysis" as defined in section 4(c) of the Wilderness Act.

Policy to abide by the Wilderness Act.

#### Guideline-INV 1

Adopt the Carhart Model (Arthur Carhart National Wilderness Training Center) for completing minimum requirement analyses and minimum tool analysis. The model assists managers in making administrative decisions concerning wilderness. In addition to the minimum requirements analysis, it includes an analysis to determine which of available treatments will have minimum impact.

BMP. BLM has its own minimum tool analysis process, coupled with NEPA. The Carhart Model is recognized by BLM and products from the Carhart NWTC are endorsed by BLM. The use of this model is currently available for use and voluntary for those field offices that choose to use it.

### **OBJECTIVES AND STANDARDS FOR REVEGETATION**

#### Objective-INV 22

In revegetation efforts, whenever it is possible to do so, use native seed and seedlings that have been grown from seeds of plants closest to the habitat being revegetated. BMP

#### Standard-INV 52

Use non-natives only in extremely degraded/severely altered systems as an intermediate step toward/placeholder for native restoration, accompanied by a full commitment to complete restoration of native species. This commitment must be included in the governing NEPA analysis FONSI/ROD and funds set aside as part of the project, with specific deadlines for accomplishment. This contradicts INV-8 above - Prohibit planting of exotic species. By definition, non-natives are exotic.

It is a recognized IWM technique to do exactly what is stated here, to restore natives in degraded systems or with severely competitive species.

#### Standard-INV 53

If native seeds/plants are not available, revegetation projects will rarely be undertaken until native plant seed or plants become available. This contradicts INV 20 above. ESR program and BAER evaluations determine need for reseeding. Native seed is used if available, however, reseeding would not be deferred pending availability. This is counter to existing policy to stabilize and revegetate areas to prevent erosion and/or weed spread.

#### Standard-INV 54

When reseeding with non-native species, certification will have to be provided that only species that have been documented as non-persistent are present in the seeding mixture.

Policy. Stipulated in seed purchase contracts to be weed free. Seed lots are sampled and tested.

#### Standard-INV 55

Assure availability of native seed and plants:

1. establish BLM contracting systems that will provide growers the necessary assurance their seed/plants will be purchased if grown
3. establish sufficient storage facilities for native seeds for major revegetation efforts.

Seed availability, warehousing and grower incentives are part of an on-going national effort as directed by Congress. Sufficient storage is already available and more is being established. To some degree, this will be discussed in the EIS.

Objective-INV 23

Determine, in landscape, watershed, and subwatershed vegetation assessments, the feasibility of providing habitat for wildlife and plant species that have been extirpated or nearly extirpated on BLM lands.

Outside of scope, EIS is not intended to address re-introductions of extirpated species. This is not a vegetation treatment analysis issue.

Standard-INV 56

Prepare a public report on potential reintroduction of extirpated species, including foreseeable human activities or developments that would foreclose options for such reintroductions. Outside of scope, EIS is not intended to address re-introductions of extirpated species. This is not a vegetation treatment analysis issue.

Invasive Exotic Species Notes

1. These crusts of lower plants and cyanobacteria cover soil surfaces between individual plants in healthy arid grasslands, shrublands, and dry woodlands. While they fix nitrogen, increase soil fertility, improve water infiltration, stabilize soils, and enhance the establishment of vascular plants, they also may provide a shield that reduces or prevents establishment and spread of exotic species. Biological soil crusts are particularly susceptible to damage from physical disturbance.

CHAPTER 7  
WATERSHED, AQUATIC AND RIPARIAN RESTORATION

GOAL-WATER 1

Watersheds are maintained and restored to provide native ecosystem structure and function. The health, diversity, and resiliency of aquatic ecosystems are restored (see Watershed Note 1).

Objective-WATER 1

Establish general aquatic conservation objectives that will serve as both goals and sideboards for all site-specific vegetation restoration activities and programs.

Standard-WATER 1

Vegetation restoration activities shall contribute demonstrably to attainment of the aquatic conservation objectives

Objective-WATER 2

Conserve remaining native vegetation, aquatic species, and native community strongholds.

Objective-WATER 3

Recover threatened, endangered, and sensitive aquatic and riparian-dependent species.

Objective-WATER 4

Restore depressed native aquatic species and restore connectivity in watersheds where populations of native aquatic species are presently fragmented because of native habitat degradation, loss or disruption.

Objective-WATER 5

Restore watershed, stream channel, water quality, riparian integrity and soil productivity where native riparian vegetation, natural watershed function and condition have been degraded.

Objective-WATER 6

Identify and protect sensitive soil and water resources through the completion of soil surveys and slope stability assessments.

Objective-WATER 7

Map and protect important aquatic areas, such as riparian areas, steep/unstable slopes, wet meadows, and aquatic species' strongholds.

Standard-WATER 2

Overlay these maps with:

1. A grazing allotment assessment with the goal of phasing out grazing in sensitive areas over time. These include degraded areas, key habitats, and areas where grazing is clearly incompatible with native vegetation and habitat recovery.
2. A logging assessment with the goal of ceasing logging in areas where there is a high risk that it will thwart the recovery of native vegetation or increase existing levels of degradation.
3. A roads and ORV routes assessment with the goal of closing and decommissioning roads and ORV routes in ecologically sensitive areas including riparian areas, unstable slopes, sensitive watersheds, and wildlife migration corridors (see Watershed Note 2).
4. An amphibian assessment. Avoid herbicide use in amphibian habitats, as many amphibians are highly vulnerable to herbicide applications and drift.

Standard-WATER 3

Identify riparian conservation areas, consisting of the riparian community and hydrological energy zones; and an outer zone that takes into consideration the need to buffer the riparian conservation area as well as slope stability and soil erodibility factors.

Standard-WATER 4

Prohibit land disturbing activities in the riparian conservation areas. Exceptions are the removal of timber to protect human health and safety.

Standard-WATER 5

Avoid application of herbicides where possible in riparian conservation areas; prohibit broadcast spraying in riparian conservation areas. Avoid application of herbicides (e.g. atrazine) with documented adverse effects on fish, amphibians, and other aquatic species.

**BMP.** Riparian conservation areas would be established through land use planning, however, there is already policy to avoid spraying herbicides in sensitive habitats or riparian areas, as well as particular label restrictions governing the application of herbicides. As a note, BLM has not used atrazine widely in over ten years as there are other more effective herbicides available.

Standard-WATER 6

Suspend livestock grazing on non-cohesive soils in perennially saturated meadows.

Standard-WATER 7

Cease new road construction and most road reconstruction in order to avoid proliferation of invasive species in riparian areas.

Standard-WATER 8

Active restoration will avoid in-stream channel manipulations except those of an emergency nature required to establish connectivity between the riparian and riverine environments, or those of a research-based nature.

Objective-WATER 8

Monitor progress toward attainment of long term health and integrity of the watershed, aquatic, riparian, native vegetation and soil resources.

Watershed Notes

1. The three most common activities on public lands managed by the BLM that continue to contribute to declining watershed health are:

- *Livestock grazing*, which has caused severe, widespread, long-lasting damage to soils, vegetation, riparian areas, streams, and associated species;
- *Roads*, which damage water quality, riparian areas, the quantity and timing of water flows, aquatic and riparian flora and fauna, and the overall hydrologic and ecological functions of watersheds; and
- *Logging*, which has contributed to degradation of water quality, riparian areas, soils, vegetation, and aquatic resources.

These activities lead to elevated sedimentation, degraded soils, degraded riparian areas, and altered stream flows within much of the BLM-managed landscape. Fire in watersheds, a natural process, plays a far smaller role in watershed degradation than these activities.

2. Scientific literature indicates that the cumulative negative impacts of roads, logging, and livestock grazing far surpass fire as the major sources of watershed degradation.

**General summary.** Many of the objectives stated are policy within BLM and covered in the assessment process outlined in H-4180-1 Rangeland Health Standards Handbook. Based on the Watershed Note above, this discussion is completely outside the scope of the EIS for the reasons already previously stated. This EIS is not intended to determine management of watersheds, which is developed through the land use planning process, but to assess the environmental impacts of particular vegetation treatment methods, as they are applied to vegetation. The Standards described above purport to set management restrictions on allowable uses which is outside of the scope of this EIS.

## CHAPTER 8 WILDLIFE HABITAT

### GOAL-WILD 1

Native biodiversity and wildlife habitat are protected and enhanced. Threatened, endangered, candidate and sensitive species populations are enhanced. Wildlife populations are broadly distributed across the landscape with population interaction occurring, maintaining population viability and long-term evolutionary potential. All native wildlife and plant species receive the benefit of doubt regarding evidence of harmful impacts, even if cause and effect have not been conclusively proved. Degraded and fragmented habitats are being restored.

### Objective-WILD 1

Prepare a broadscale assessment of habitat types based on vegetation communities, and assess conditions for habitat-obligate terrestrial wildlife species within these vegetation communities in the sixteen western states (See Prevention, Conservation and Restoration Assessment Objectives and Standards.)

### Standard-WILD 1

For habitat-obligate species or other species of concern, identify critical habitat features, and design treatment to protect or enhance these features to extent possible.

### Standard-WILD 2

Consult conservation center databases and other sources of information and scientists on species occurrence – absence of data may simply mean no reliable inventories have been conducted in the past.

### Standard-WILD 3

Identify the least intrusive/extensive/risky methods to enhance wildlife habitat and populations.

### Standard-WILD 4

Shape specific treatments to account for wildlife habitat needs, for instance, by the timing and location of activities. Avoid treatments during nesting season for migratory birds, and during identified sensitive periods for wildlife (e.g., critical wintering habitat for big game or sage grouse).

### Standard-WILD 5

Assess cumulative effects of management activities, human disturbance activities or natural disturbance processes that impact wildlife habitats and populations in relation to disturbances associated with proposed treatment.

### Standard-WILD 6

Conduct effects of site-specific treatments on an array of species; reliance on assessments of effects only on umbrella species is not sufficient (see Wildlife Habitat Note 1)

### Standard-WILD 7

Minimize disturbance from treatment to other species. Avoid treatments that could reduce scarce or poorly distributed habitats.

### Standard-WILD 8

Restore areas invaded or converted/seeded with non-native species where beneficial for wildlife populations of concern.

### Guideline-WILD 1

Avoid activities that fragment blocks of intact habitat.

### Wildlife Habitat Notes

1. An example of the insufficiency of analysis for effects solely on an umbrella species involves sagebrush canopy “thinning” for sage grouse. This may negatively impact nesting cover for migratory bird species of concern.

Overall, everything mentioned above is already policy within BLM to conserve and protect wildlife habitat. The standards mentioned are already applied in the project design phase of any wildlife habitat treatment or other vegetation treatment/conversion project and analyzed through the NEPA process.

## CHAPTER 9 MONITORING AND RESPONSE TO MONITORING

### GOAL-MONITOR 1

Before resources are committed to modify a plant community, baseline data will be gathered to reflect existing conditions. If treatments are initiated, data will be collected to substantiate whether or not any of the goals, objectives, and standards have been met. If baseline and post-treatment evaluation monies are not available, then the project will not be approved (see Monitoring Note 1).

### Objective-MONITOR 1

Monitoring will be used to:

1. Inventory baseline conditions at the landscape, watershed, subwatershed, and project site levels
2. Measure whether positive goals for native ecosystem recovery, conservation, and integrity are being attained
3. Track biodiversity and health using an increaser/decreaser species procedure (including biological soil crusts, wildlife, and endemic/sensitive species).
4. Practice precaution, retain flexibility, and respond to change, unforeseen harm, failure to reach objectives, and/or new information
5. Quantify invasive species population changes

### Standard-MONITOR 1

Monitoring and evaluation of conservation and restoration activities will:

1. Relate to the clearly stated objectives of all restoration projects
2. Be an integral component of each restoration project
3. Be incorporated into the essential costs of each project
4. Use scientific principles of experimental design including replication and measurements from untreated control areas for comparison with treated locations
5. Use a process responsive to all-party and scientific input
6. Encourage involvement of local, regional and national stakeholders
7. Be documented in a sixteen-state central database with assessments, objectives, monitoring procedures, and analyses in comparable formats
8. Outline clear procedures for responding to monitoring and evaluation results and new information.

### Standard-MONITOR 2

Monitoring methods will be:

1. Relevant: evaluates progress toward stated objectives
2. Sensitive: quickly detects change, shows trends, identifies critical features
3. Available: inexpensive, easily applied
4. Measurable: accurately quantifiable with acceptable methods
5. Defensible: minimally subject to individual bias
6. Verifiable: allows others applying the same methods to achieve similar results
7. Inclusive: avoids reductionism, where feasible
8. Scheduled: monitoring interval firmly scheduled.

### Objective-MONITOR 2

Goals, objectives, standards, and guidelines will be written for all projects tiered to this EIS. All projects will be monitored to determine if their goals, objections, standards, and guidelines are being met on schedule.

### Standard-MONITOR 3

All goals, objectives, and standards and guidelines will be written in such a manner as to be measurable with concrete ecosystem indicators. Reliance on "professional judgment" without evidence will be minimized, so that conclusions and ecosystem conditions can be independently verified.

### Standard-MONITOR 4

Each District will prepare an annual monitoring report of all vegetation restoration projects (passive and active). These reports will be available at a central BLM location within the 16 western states (Monitoring Note 2). [Outside of scope. EIS is not intended to establish a centralized location where annual monitoring reports will be available. See earlier discussion on this. BLM is working towards centralized information distribution and assessment clearinghouses already and will take many years to develop and gather information from many decentralized locations.](#)

Standard-MONITOR 5

Annually report whether goals, objectives, standards and guidelines are being met or not. For those that are not being met, indicate plans for meeting them or of altering the conditions and/or activities that are not providing for their attainment.

Standard-MONITOR 6

All proposals to permit or undertake a vegetation restoration activity will include a description of the monitoring that will be necessary to determine the compatibility of the activity with specific goals, objectives, standards and guidelines.

Monitoring Notes

1. There is an obvious, admitted, ongoing, and institutional failure to adequately monitor, survey, and document the impacts of human activities on habitats, native vegetation, and native wildlife on federal public lands. Even when monitoring has occurred, land managers have rarely translated the findings into management improvements. Good intentions and monitoring plans have been insufficient to direct sufficient funding, staff, or attention to the outcomes of vegetation and other restoration treatments, among other human activities. It is essential that both the continuation and initiation of vegetation restoration activities be dependent upon prior adequate baseline and post-treatment monitoring. "We do what we get funded for" is neither a legally sufficient nor an ecologically responsible approach to the required, continuous, finding of compatibility of treatment activities with the goals, objectives, standards, and guidelines of this EIS.

3. Monitoring needs to be documented so that it can be independently reviewed by non-BLM scientists, the scientifically literate public, and others who are concerned about the ecological health of the nation's federal, public lands.

[Overall, BLM monitoring is guided by existing handbooks on methods and techniques to accomplish monitoring. Monitoring will be addressed in the EIS and some of the items listed above could be proposed as BMPs.](#)

## CHAPTER TEN TRIBAL RELATIONS

### GOAL-TRIBES 1

Native American Indian concerns and issues relative to vegetation management in the planning area are addressed and mitigated in full collaboration with Native Tribal people.

Already policy to consult under a variety of Legislative mandates, including the American Indian Religious Freedom Act, National Historic Preservation Act, and others, as well as the E.O. mentioned below. Mitigation, if appropriate, is conducted in collaboration with Native tribal governments.

### Standard-TRIBES 1

Consultation and collaboration with Native Tribes will take place throughout the process of developing and implementing this EIS in accordance with Executive Order No. 13084, Consultation and Coordination with Indian Tribal Governments.

Already policy and built into process.

### Standard-TRIBES 2

Native Tribal representatives from Tribal governments and organizations will be contacted when vegetation management proposals are proposed. Particular attention will be given to consultation and collaboration with local Tribal people when activities are planned that may affect Native cultural resources, hunting, fishing and gathering areas, sacred sites, or Tribal trust lands.

Already policy and implemented at field level.

### Objective-TRIBES 1

Vegetation management proposals will be analyzed with respect to environmental justice concerns pursuant to the requirements of Executive Order No. 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.

Already policy per WO Instruction Memoranda to include environmental justice in every NEPA document for all actions.

### Standard-TRIBES 3

In collaboration with Tribal people, identify culturally significant plants used for food, basketweaving and other fibers, medicine, and ceremonial purposes.

Already policy and is one of the purposes of consultation.

### Standard-TRIBES 4

Develop protocols (?) for enhancement and protection of culturally significant plants used for food, basketweaving and other fibers, medicine, and ceremonial purposes, which include the following:

1. Utilize traditional indigenous knowledge and wisdom to protect and enhance native vegetation communities, native resources, and ecosystems.
2. Prioritize vegetation management proposals that will enhance and preserve culturally significant plants and animals.
3. Use minimal impact vegetation treatments where culturally significant species are known to occur. Vegetation treatments will not result in net loss of native species of importance to indigenous people for subsistence or cultural purposes.

### Standard-TRIBES 5

Establish herbicide-free zones to protect culturally significant plant and wildlife resources from contamination with herbicides. Potential mitigation developed through consultation, where these resources are identified.

#### Standard-TRIBES 6

Provide full disclosure and notification of herbicide spraying proposals to Indian communities. Provide notification of the exact locations, dates, and times that herbicide applications will take place to Indian communities via letters of notification and posting in prominent locations (such as community bulletin boards and local post offices).

Standard Environmental Justice policy actions already encouraged by BLM and identified in EPA guidance which is adopted by BLM.

#### Standard-TRIBES 7

Develop monitoring protocols to assess the impacts of different vegetation management approaches upon the viability and health of culturally significant plants and animals. Adapt management plans as necessary to ensure culturally significant plant and animal resources are protected for seven generations.

Overall, there is nothing to analyze in this section. Most of the goals, objectives and standards are already policy by legislative or Executive Order mandate. These are all process actions and built into current Native American and Environmental Justice guidance. There is no proposal in any alternative to do anything different than what is already mandated by law, thus there is nothing to compare and contrast with.

#### Summary:

As stated in the meeting in Reno, the format for the RNE alternative follows a Forest Service Land Use Planning Format which is not amenable for detailed analysis in the Vegetation EIS document. Additionally, the FS and BLM scheme for stating Goals, Standards and Objectives for a planning effort do not follow the same order e.g. FS: G-O-S; BLM G-S-O. Which even if the RNE alternative were applicable to a BLM land use planning document, which this is not, it would present some difficulty in analyzing because of the agency differences institutionalized in their planning.

Below is provided a basic outline of how the alternatives in the Veg EIS will be formatted. Perhaps, when consideration of these comments is taken into account and some thought provided to what the alternative should address, an alternative can be constructed which would lend itself to meaningful analysis.

For example, BLM is addressing levels of treatment acres in its alternatives such as 3.5 million acres of fuels reduction per year, and up to 1 million acres in various programs including weeds, riparian and wildlife enhancement, etc, through various treatment methods (refer to the existing EISs for examples of how this EIS is being conducted and analyzed). The RNE alternative thus appears to support this level of treatment for fuels reduction and not propose any more or less as it is silent.

The RNE alternative proposes elimination of use of two types of herbicides. Thus it is assumed the RNE alternative supports the use of the already approved herbicides in general as well as the toxicological risk assessments to add more herbicides for use on public lands and increased use of these herbicides on a proportional basis as outlined in the 19 scoping meetings.

This will make the analysis much easier for BLM as this is similar to or the same as BLM Proposed Action. In contrast, BLM also has alternatives suggested to increase fuels reduction work to 10 to 25 million acres per year and other proposals to eliminate the use of all herbicides on public land.

In general and overall for the entire RNE alternative, for those portions which are not out of scope or in conflict with themselves, is that the impacts of implementing existing policy as described would be the same as the BLM Proposed Action. For the most part, the policy areas outlined above would fall under "common to all alternatives" heading. Where there are differences they would be noted in your alternative description.

It is clear that the RNE alternative is very similar to the BLM proposed action as described in the public meetings, by the heavy reliance on existing BLM policy, with some minor differences. I invite you to consider the above comments to assist you in better defining an alternative for analysis in the EIS.

As a note, the alternative descriptions will overall be on the order of a few pages each, at most, addressing overall acres proposed to be treated, by treatment method, therefore conciseness would be appreciated. Per 40 CFR 1502.7 BLM has set page limits on the analysis content of this EIS to be less than 300 pages (excluding appendices, etc.). At this time, the RNE alternative description as it stands is approximately 14% of the EIS which is disproportionate to the other alternative descriptions and subsequent analysis.

I recommend that you do not use the RNE format as it currently is (G-O-S) for the reasons cited above. It would be more amenable for analysis if you extract the salient points which do not relate to land use planning and are within the stated scope of analysis and attempt to fit them into the categories described under the sub-headings identified under Program Goals and Management Practices Common to all Alternatives. Thus, where differences exist between BLM policy and what you propose, these can be easily sorted out for comparative analysis.

## Outline for Alternatives

Treatment Areas Evaluated Under the Proposed Alternatives

Treatment Methods Evaluated Under the Proposed Alternatives

- Prescribed Fire

- Mechanical

- Manual

- Use of Herbicides

- Biological Control

- Cultural Control

Chemicals Evaluated Under the Proposed Alternatives

- Herbicides Approved under Existing RODs

- New Herbicides

Proposed Action and Alternatives

- Alternative A – No Action Alternatives

- Alternative B – Proposed Action

- Alternative C

- Alternative D

- Alternative E

Program Goals and Management Practices Common to All Alternatives

- Planning and Management

- Site Selection and Treatment Priorities

- Vegetation Treatment Method Selection

- Revegetation

- Best Management Practices

  - General

  - Prescribed Fire

  - Mechanical/Manual

  - Herbicides

  - Biological Control

  - Cultural Control

- Monitoring and Evaluation

- Special Precautions

  - Special Status Species

  - Special Designation Areas

  - Cultural Resources

- Coordination, Education, and Public Awareness