RESTORE NATIVE ECOSYSTEMS ALTERNATIVE

Vegetation Treatments, Watersheds and Wildlife Habitats on Public Lands Administered by the Bureau of Land Management in the Western United States, Including Alaska Draft Environmental Impact Statement

Basic outline for scoping period with deadline, March 29, 2002. Full alternative to be provided by the date other (BLM) alternatives are prepared, or April 28, 2002, whichever is later.

1. GENERAL PRINCIPLES

    a. Problem

        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.

    b. Goal

        Enhance ecological integrity by restoring natural processes, fully functioning ecosystems, and resiliency. 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.

    c. Conservation and Restoration

        Clearly state conservation and restoration objectives, and use best available science to assess the likelihood of activities contributing to long-term ecological integrity.

    d. Caution

        Restoration must be done carefully and with humility, recognizing that ecosystems are complex and our understanding of them and the consequences of our activities are limited.

    e. Necessarily-Integrated Components

        Vegetation management actions will allocate roughly equal proportion of effort and commitments (e.g., funding, staff time) to:

        i. Prevention of conditions that favor vegetation problems
        ii. Treatment of vegetation problems
        iii. Restoration of ecological integrity on sites that have been treated

f. Assessment and Monitoring

Budgets will include realistic and dedicated funding for, and an institutional commitment to, assessment, monitoring and response to monitoring results and new information, with assessment and monitoring systems designed and in place before activities commence.

g. Public Participation

Public participation by local, regional and national stakeholders in such activities as assessment, monitoring, provision of new and scientific information, review of assessment and monitoring protocols, and selection of alternatives for actions will be facilitated and encouraged.

h. Incentives

Incentives for prevention of vegetation problems and restoration of ecological integrity will be clear and significant; as well as disincentives for activities that encourage vegetation problems and delay recovery of ecological integrity.

i. Economics

Restoration and conservation activities and management of vegetation will be 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 utilizing local community workforces whenever feasible.

2. ASSESSMENT

a. Bioregional restoration assessments will be done for this programmatic EIS. Watershed and site-specific assessments will be prepared and baseline biological inventories will be conducted prior to beginning restoration activities or implementing a site-specific restoration project. An assessment is conducted to determine if any restoration activities are needed and is used to:

i. Identify the root causes of ecosystem degradation source at the ecoregional level (in this EIS) and watershed and site-specific levels (in site-specific Environmental Assessments);
ii. Determine appropriate methods for restoring degraded systems, favoring the least intrusive/intensive methods that will effectively move the site toward ecological integrity; and
iii. Create a prioritization of restoration needs, both for passive and active restoration.

b. Assessment of BLM holdings in the sixteen western states will identify:

    i. Key areas of high integrity and native vegetation; areas of mixed native and exotic vegetation and condition; and areas of low integrity;
    ii. Areas where restoration will increase potential for habitat connectivity;
    iii. Areas that could benefit from restoration to maintain or enhance ecological integrity; and
    iv. Spatial and temporal association of particular problems with vegetation management or invasive species with particular human activities.

c. Objectives and Monitoring

    i. All restoration projects and activities will be associated with:
        1. Clearly-stated conservation and restoration objectives; and
        2. Specific indicators and measures for determining effectiveness.

3. PREVENTION

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).

a. The BLM will develop and implement comprehensive, science-based general guidelines designed to prevent the spread of invasive species in relation to all activities that the agency is considering authorizing, funding, or carrying out. Activities 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 include, but are not limited to, the following:

    i. Road and ORV trail construction and maintenance.
    ii. Oil, gas, and mineral exploration and development.
    iii. Livestock grazing.
    iv. Motorized vehicle use.
    v. Commercial timber sales and fuels reduction.

4. CONSERVATION AND RESTORATION ACTIVITIES

a. Conservation and restoration methods will include:

    i. Protection of areas of high ecological integrity;
    ii. Passive restoration: cessation of activities that have been demonstrated to impede natural recovery;
    iii. Active restoration to restore ecological integrity in areas of greatest risk; and/or
    iv. Active restoration projects that incorporate passive techniques.

b. Passive restoration may include:

i. Area and road and ORV trail closures;
ii. Voluntary livestock permit retirement;
iii. Retirement of vacant livestock allotments;
iv. Livestock grazing restrictions (e.g., in aggressive weed infestations, in uplands “at risk” of weed infestation, riparian areas, TES habitat, springs, wetlands);
v. Restrictions on logging activities; and/or
vi. Restrictions on oil and gas and mineral development.

c. Active restoration may include:

i. Road and ORV trail removal;
ii. Culvert removal;
iii. Prescribed burning;
iv. Fuels reduction/thinning;
v. Invasive exotic species control;
vi. Fish and wildlife habitat rehabilitation;
vii. Reintroduction of extirpated species;
viii. Reconnection of flood plains with streams; and
ix. Other necessary activities based on priorities established in the ecological restoration assessment.

d. Restoration and conservation activities will utilize:

i. A thoughtful, careful, and precautionary approach.
ii. Best available science and experiential and indigenous conservation and restoration knowledge where applicable.
iii. An adaptive and public process that regularly incorporates revisions from monitoring and evaluation.
iv. The least intrusive techniques available to restore ecological integrity.
v. The least risky interventions that are likely to provide the greatest ecological benefit.
vi. Recovery plans for threatened and endangered species, or improvements on such plans.
vii. Prevention strategies to reduce the need for treatments, so that the number of acres treated annually declines over the life of the EIS.

5. FIRE MANAGEMENT

a. Prescribed fire will be used:

i. Where ecologically appropriate to restore natural fire regimes and native ecosystem function;

ii. Only in concert with a restoration assessment with clearly defined restoration objectives; and
iii. Where invasive species will not be increased.

b. Fire control will be used to protect areas of high ecological values that may be at risk from exotic species invasion following fire, especially in low elevation locations.

c. Burned areas (natural or prescribed) will be protected from livestock grazing for at least five years.

d. Fire management needs to be based on the 1995 Wildland Fire Policy.

e. Fire Management Plans need to be created for every burnable acre. Fire Management Plans:

i. Allow certain remote wildland areas to burn under carefully prescribed conditions in order to maximize ecological benefits;
ii. Minimize overall management costs;
iii. Prevent emergency fire fighting expenditures; and
iv. Should be collaborative, fully including the public and utilizing the best available science.

6. FUELS TREATMENT

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

i. To protect lives and property in the wildands-urban interface (WUI) and not in the backcountry;
ii. For essential fire planning and preparedness to maximize the efficiency and effectiveness of fuels reduction; and
iii. To restore natural fire processes, based on comprehensive restoration assessments with clearly defined objectives, in conjunction with other active or passive methods.

b. Wildlands-Urban Interface treatments

i. Intensive treatments
1. Will be undertaken primarily within 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.
2. May include thinning, pruning, mowing, roof cleaning, as well as replacement of flammable landscape and building materials

ii. Extensive treatments

Extensive treatment zone definition and management prescriptions will be provided in full alternative.

c. Fuels reduction will:

i. Minimize or avoid road construction and reconstruction.
ii. Avoid roadless areas, old growth, endangered species habitat, riparian areas, ecological sensitive areas and other areas of high ecological integrity.

d. Fuels reduction will not:

i. Increase motorized vehicle use or livestock access;
ii. Supply biomass plants;
iii. Chip material and leave it on the ground which increases fire risk and limits native plant recovery; and
iv. 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; or
    3. Other incentives that encourage activities which are ecologically degrading.

7. INVASIVE EXOTIC SPECIES

a. Priority with regard to control of invasive species will be given to two facets of the control of invasive species as defined by EO 13112.

i. Preventing spread of invasive species from areas where they are present;
ii. Restoring native species and habitats to reduce the effects of invasive species and to prevent further invasions.

b. Prevention is defined as detecting and ameliorating the conditions that cause or favor the presence of invasive species. Prevention is not limited to prevention of the *introduction* of invasive species.

c. Treatments may include (in no particular order):

i. Biological control.
ii. Cultural practices.
iii. Mechanical treatment.
iv. Chemical treatment.

d. Selection of treatments will prioritize:

    i. Treatments with the greatest likelihood (based on previous experiments or operational use) to restore natural processes and naturally occurring biotic communities.
    ii. Non-chemical methods.
    iii. Herbicides (when chemical methods have been shown to be necessary) that are known to minimize adverse effects on environmental and human health, based on knowledge of all ingredients in the formulation.

e. Revegetation projects will use seed from native species whenever possible.

    i. If native seeds are not available, projects will rarely be undertaken until seed is available;
    ii. Seed of locally-adapted ecotypes will be used whenever possible.
    iii. Any use of non-natives (which should only occur in extremely degraded/severely altered systems) as an intermediate step toward/placeholder for native restoration, will be 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.
    iv. Any non-natives used must be non-invasive/non-weedy themselves, and activities that aid any spread into interfacing areas must be limited until full restoration is accomplished.

f. Assuring availability of native seed and plants.

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

8. MONITORING AND RESPONSE

a. Monitoring will be used to:

    i. Measure whether positive goals for native ecosystem recovery, conservation, and integrity are being attained.
    ii. Practice precaution, retain flexibility, and respond to change, unforeseen harm, failure to reach objectives, and/or new information
    iii. Track biodiversity and health using an increaser/decreaser species procedure (including biological soil crusts, wildlife, and endemic/sensitive species).

b. Monitoring and evaluation of conservation and restoration activities will:

   i. Relate to the clearly stated objectives of the restoration project;
   ii. Be an integral component of the restoration project;
   iii. Be incorporated into the essential costs of each project;
   iv. Use a process responsive to all-party and scientific input;
   v. Encourage involvement of local, regional and national stakeholders;
   vi. Be documented in a sixteen-state central database with assessments, objectives, monitoring procedures, and analyses in comparable formats; and
   vii. Outline clear procedures for responding to monitoring and evaluation results and new information.

c. Monitoring methods will be:

   i. Relevant: evaluates progress toward stated objectives;
   ii. Sensitive: quickly detects change, shows trends, identifies critical features;
   iii. Available: inexpensive, easily applied;
   iv. Measurable: accurately quantifiable with acceptable methods;
   v. Defensible: minimally subject to individual bias;
   vi. Verifiable: allows others applying the same methods to achieve similar results;
   vii. Inclusive: avoids reductionism, where feasible; and
   viii. Scheduled: monitoring interval firmly scheduled.