Decision Memo

Seedhouse Fuels Reduction Project

USDA Forest Service
Hahns Peak/Bears Ears Ranger District, Medicine Bow-Routt National Forests
Routt County, Colorado
T9N, R84 & R85W

Background

The purpose of this project is to protect private land (urban interface) from wildland fires by reducing fuels, thereby reducing fire intensity and rate of spread to levels that meet Forest Plan direction for fire management.

There is a need to improve defensible space by reducing hazardous fuels in the corridor near and adjacent to private lands. The fires of 2002 generated local awareness of this and many landowners have completed defensible space work on their lands. The Forest has been approached by both local landowners and local government to treat National Forest lands to complement the work already completed by those entities. The Routt County Fire Management Plan identifies a need to reduce hazardous fuels in the wildland/urban interface, with Clark and the Seedhouse areas as priorities.

Currently, this area of the Forest is changing due to the presence of a mountain pine beetle epidemic. The Bark Beetle Analysis (2002) identified a purpose and need to minimize tree mortality in this area to meet desired conditions in the Forest Plan. With the continued threat of widespread conifer mortality, the proposed action is designed to prevent build-up of additional hazardous fuels with specific fuel management to complement the Bark Beetle Analysis.

A secondary purpose of this project is to improve wildlife habitat conditions for species such as deer and elk in the mountain shrub vegetation type.

The Yampa Valley Elk Winter Range Assessment (2003 & 2004) identifies several areas in need of regeneration to meet desired conditions. Regeneration of shrub and aspen stands provides multiple benefits for wildlife, scenery and hazardous fuels.

The **Seedhouse Fuels Reduction Project** is the second proposal to be developed, in part, as a result of the Yampa Valley Elk Winter Range Assessment. It is anticipated that through the continued implementation of this and future projects that the elk winter range in the Yampa Valley can be highly productive and able to adequately support the area's elk herds, which will help reduce impacts to private land haystacks and displacement of elk due to human development on private land winter ranges.

Decision

Proposed Action

My decision includes the following activities:

***Defensible Space Treatments (223 acres*):** Defensible space treatments include mechanically removing or altering the vegetation, whether live or dead, to provide a zone of lessened fuels in close proximity to the forest boundary and existing structures. The defensible space treatments will work in conjunction with similar efforts occurring on adjacent private lands and within the permitted Seedhouse Summer Home Group. These treatments are meant to complement or lead by example with FIREWISE-type solutions to defensible space issues.

Slash Treatment (138 acres): Seven timber sale units currently marked and scheduled for sale within the Barley Patch Timber Sale occur in strategic locations for further specific actions related to fuel reduction techniques. These timber sale units, previously analyzed in the Bark Beetle Analysis FEIS (2002), can greatly improve the fuel hazard reduction in the Seedhouse area by incorporating specific slash treatment methods (whole tree skidding or similar treatments) to all or parts of the identified units.

***Prescribed Burning (1156 acres*)**: The vegetation in the prescribed fire treatment areas consists primarily of Gambel's oak, sagebrush and other mountain shrub types. All or some aspen and conifer stands are also included for treatments with the objectives of reducing surface fuels; regenerating aspen, oak and other shrub species; and returning fire to a fire-adapted landscape. Treatments will include prescribed burning in a mosaic pattern, with limited clearing or control line building where needed to provide for safety and improve prescribed fire feasibility. Burns will occur in either spring or fall to increase prescribed burn window options. Existing roads, natural vegetation breaks, topographic breaks, black-lining, and potentially minimal amounts of constructed handline (< 5 acres) will be used for prescribed fire feasibility.

Design Criteria

Terrestrial and Aquatic Wildlife

- Protect active and inactive raptor nests according to the Forest Plan.
    - Manage prescribed fire implementation to avoid causing excessive smoke going into active northern goshawk nesting stands during the nesting period. This is for nest stands that are immediately adjacent to prescribed burn units.
    - Mechanical disturbance in the creation of prescribed burning fire lines or implementation and control of prescribed fire implementation should not be done during the nesting season March 15 until August 30, for areas within ¼ mile of an active goshawk nest.
    - Establish a maximum of a 5 acre no-burn zone around active flammulated owl nests located in prescribed burn units. Extent of buffer will depend on condition and availability of treed cover types within burn areas.
- Manage livestock grazing in burned areas for at least 2 years post-burn to allow for establishment of grasses and forbs.

Canada Lynx Conservation Agreement and Strategy

- Design burn prescriptions to regenerate or create snowshoe hare habitat (e.g., regeneration of aspen and lodgepole pine).
- Design burn prescriptions to promote response by shrub and tree species that are favored by snowshoe hare.
- Design burn prescriptions to retain or encourage tree species composition and structure that will provide habitat for red squirrels or other alternate prey species.
- Consider the need for pre-treatment of fuels before conducting management ignitions.
- Design burn prescriptions and, where feasible, conduct fire suppression actions in a manner that maintains adequate lynx denning habitat (10% of lynx habitat per LAU).

Range

- Ensure protection or replacement of existing range improvments and structures.
- Survey and treat spotted knapweed, leafy spurge, yellow toadflax or any additional priority species on NFS land in or near any of the proposed treatment areas.
- In order to prevent spread, vehicles will avoid areas where known infestions of spotted knapweed, leafy spurge, toadflax, etc. occur.

Recreation

- Avoid impacting permitted recreation activities in units 3-B and 3-C during the high use season, typically June to mid-September.
- Treatments in Seedhouse and Hinman campgrounds will occur before the campgrounds open in the spring/early summer or after they close in the fall, or when not occupied.
- Be aware of impacts to all recreation users during the summer and fall for all treatments. If possible burning should avoid high use occupancy periods of the year.
- Coordinate with recreation resident permit holders in the Elk River Summer Home Group to determine whether permittees or the Forest Service will conduct mechanical treatments.

Visual Resources

- To create a natural appearing landscape, the following measures will apply where vegetation and ground conditions allow:
    - Allow prescribed burn edges (fire lines) to be irregular and undulating to create a natural appearing mosaic landscape pattern. Use minimum handline, natural vegetation and topographic breaks, road edges and black lining for fire lines as feasible**.**
    - Retain and protect natural features such as rock outcrops, young healthy trees, understory trees of lodgepole pine, aspen and spruce/fir, shrubs and forbs in the immediate foreground (approximately 25 to 100 feet from edges of road) of National Forest System Roads 400 and 440 as feasible to minimize the visual impact and to meet Partial Retention VQO. Slash will be removed and stumps will be cut as close as possible to the ground in the immediate foreground (approximately 25 to 75 feet) of the above-mentioned roads and within developed recreation sites.
    - Revegetate disturbed soils on landings, burned piles and skid trails with native seed mixture after the completion of fuel reduction project to reduce soil contrast and blend with the surrounding landscape.

Botany

- Slash piles will be limited to approximately 300 square feet when not located on landings to minimize excessive soil heating during burning.
- Chipped material should be applied at a rate of no more than 3 inches depth at 25-50% ground cover within the activity area.

Hydrology

- Riparian areas will not be intentionally ignited during firing operations, and a sufficient buffer strip will be left to filter increased sediment and ash loads that may result from burning operations.
- If fire backs into the riparian or buffer strip area after an ignition, direct suppression actions will not occur unless a chimney scenario were to develop.
- For all burning, direct ignition will never occur within any riparian area. This includes riparian areas adjacent to perennial or intermittent channels, and ephemeral draws containing riparian vegetation. Ignition will occur on a natural topographic break, or where a change in vegetation from wetter to drier species occurs to promote fire movement away from riparian areas.
- Buffer strips will be based on four variables; type of stream, side slope, riparian width, and season.
- The identified buffer strips were used for planning purposes only, and may be adjusted on the ground where natural topographic breaks or changes in vegetation communities will be more effective than the identified distances. In all cases, the purpose will be to minimize increases in stream sedimentation, turbidity, and delivery of nutrients to the stream network.
- A spring ignition will require a direct ignition to occur 100 feet from defined streams or at a natural topographic break, whichever provides the most riparian protection.
- A fall ignition will require a direct ignition to occur 125 feet from defined streams or at a natural topographic break, whichever provides the most riparian protection. This buffer increase is due to typically drier vegetation conditions.
- As slope adjacent to these stream types increases above 30% an additional 50 feet of buffer will be required to adjust for the potential increases in water runoff energy and ignited rolling materials. Spring ignitions will require 150 feet, and fall ignitions 175 feet.
- Where the riparian vegetation width exceeds 50 feet, buffers will be applied from the edge of riparian vegetation and follow the same guidelines with regard to slope.
- There will be no equipment on any slopes within 150 feet of a water course or water body. Slash resulting from the mechanical treatments must be prevented from entering stream channels, and minimize the connected disturbed area. When not operating, all equipment requiring fuel must be parked or stored 200 feet from any water body or water supply (campground wells) and have on-site fuel spill containment equipment. Mechanized equipment operated in defensible space units would utilize existing roads and compacted surface for operation prior to creating new disturbed site for fuel reduction.
- Coordination with watershed staff during development of the burn plan and implementation is recommended. This would help to develop the best plan which protects water quality and aquatic resources, yet meets the intent of the prescribed burning.

Heritage Resources

- The Seedhouse CCC Outhouse (5RT462**)** and the historic road (5RT2282.1) should be avoided by all destructive project activities.
- If any *new actions*, such as hand lines, are planned that were not specifically identified in the proposed action, an archaeological assessment will be required. The assessment may find that additional cultural resource surveys will be needed.
- To mitigate the effects of erosion on cultural resources after thinning and burning, Forest Service personnel need to report substantial erosion in treatment areas to archaeologists.
- All persons associated with operations under this authorization must be informed that any objects or sites of cultural, paleontological, or scientific value such as historic or prehistoric resources, graves or grave markers, human remains, ruins, cabins, rock art, fossils, or artifacts will not be damaged, destroyed, removed, moved, or disturbed. If in connection with operations under this authorization any of the above resources are encountered, activities will immediately be suspended in the immediate vicinity of the discovery that might further disturb such materials. Notification of the Medicine Bow-Routt National Forest authorized officer of the findings is then required. The discovery must be protected until notified in writing to proceed by the authorized officer (36 CFR 800.110 & 112, 43 CFR 10.4).

Monitoring

One or more of the following methods could be used to assess the response of vegetation pre- and post-burning treatments.

- Cover-Frequency Transects are used to monitor changes in canopy cover and relative frequency of herbaceous species. This method provides estimates of canopy cover by species, frequency, ground cover, and production by life form through replicated sampling of plot frame transects. Combining cover and frequency data helps overcome variability in the data due to climate changes. This method is mostly used to determine change in composition over time. Establish a Cover-Frequency transect in one or more of the areas proposed for burning to include a representative sample of Gambel Oak, native grasses and forbs and cheatgrass.
- The Line Intercept method consists of horizontal, linear measurements of plant intercepts along the course of a tape. It is used primarily for quantitative measurement of shrub or tree canopy cover. This method allows for measurement of shrub density along a repeatable line to determine whether shrub populations and densities are increasing, decreasing or static. Establish Line Intercept transects in one or more of the areas proposed for burning to monitor canopy cover and subsequent sprouting of Gambel Oak.
- Micro Plots are used to measure distinct populations and their response to natural or man made activities. The resulting increase or decrease of desirable or undesirable can be evaluated.
- Identify patches of cheatgrass and measure the existing cover prior to and after burning for three growing seasons.
- Photographs and Photo-points are extremely useful in documenting change in plots or on the landscape. Photos should capture the essence of the plot, point or transect, including important characteristics and features of the site. Photos need to include enough of the

horizon-line to allow the photographer to easily repeat the photograph from the same angle in subsequent years.

Reasons for Categorically Excluding the Decision

Decisions may be categorically excluded from documentation in an environmental impact statement or environmental assessment if they fall within categories listed in Title 7, Code of Federal Regulations, Part 1b, or one of the categories listed in Forest Service Handbook 1909.15 sections 31.1b or 31.2. To qualify for categorical exclusion, there must not be extraordinary circumstances related to the decision that may result in a significant individual or cumulative effect on the quality of the human environment. Interim Directive 1909.15-2004-1 states that *"the mere presence of one or more of these resource conditions does not preclude use of a categorical exclusion. It is the degree of the potential effect of a proposed action on these resource conditions that determines whether extraordinary circumstances exist."*

I have concluded that this decision is appropriately categorically excluded from documentation in an environmental impact statement or environmental assessment. It is a routine activity within two categories of exclusion (31.2.06 & 31.2.10 below) and there are no extraordinary circumstances related to the decision that may result in a significant individual or cumulative effect on the quality of the human environment. My conclusion is based on information presented in this document and the entirety of the Administrative Record for this project.

Categories of Exclusion

Forest Service Handbook (FSH) in 1909.15, Environmental Policy and Procedures, ID 1909.15-2003-1

31.2.10. *Hazardous fuels reduction activities using prescribed fire, not to exceed 4,500 acres, and mechanical methods for crushing, piling, thinning, pruning, cutting, chipping, mulching, and mowing, not to exceed 1,000 acres. Such activities:*

a) Shall be limited to areas;
    1) In wildland-urban interface; and
    2) Condition Classes 2 or 3 in Fire Regime Groups I, II, or III, outside the wildland-urban interface;

b) Shall be identified through a collaborative framework as described in "A Collaborative Approach for Reducing Wildland Fire Risks to Communities and Environment 10-Year Comprehensive Strategy Implementation Plan";

c) Shall be conducted consistent with agency and department procedures and applicable land and resource management plans;

d) Shall not be conducted in wilderness areas or impair the suitability of wilderness study areas for preservation as wilderness;

e) Shall not include the use of herbicides or pesticides or the construction of new permanent roads or other new permanent infrastructure; and may include the sale of vegetative material if the primary purpose of the activity is hazardous fuels reduction.

31.2.06. *Timber stand and/or wildlife habitat improvement activities that do not include the use of herbicides or do not require more than one mile of low standard road construction (Service Level D). Examples include but are not limited to:*

a. Thinning or brush control to improve growth or to reduce fire hazard including the opening

of an existing road to a dense timber stand.

b. *Prescribed burning to reduce natural fuel build-up and improve plant vigor.*

Public Involvement

This project was listed on the Schedule of Proposed Actions on the Third Quarter of 2006 as the Seedhouse Fuels Reduction Project. On June 4, 2006, scoping letters were mailed to approximately 180 potentially interested and concerned individuals, organizations, and affected stakeholders. After scoping comments were received a field trip and an open house meeting were provided to discuss the project at Steamboat Lake State Park on September 7, 2006; approximately eighteen people attended the meeting. Forest Service employees met frequently with local landowners and concerned organizations and individuals to ensure people understand the project; to find additional partners for the project; and to learn about and address people's concerns.

Four comment letters were received for the Seedhouse Fuels Reduction Project. No letters opposing the project were received.

Findings Required by Other Laws

Routt National Forest Land and Resource Management Plan 1997 Revision

The Routt National Forest Land and Resource Management Plan has been reviewed in consideration of this project and this decision is consistent with standards and guidelines identified for Management Areas 7.1 Residential/Forest Interface; 5.13 Forest Products; 5.41 Deer and Elk Winter Range; 4.3 Dispersed Recreation; 3.4 National River System – Scenic Rivers, Designated and Eligible; and 1.32 Backcountry Recreation-Nonmotorized With Winter Limited Motorized. Management of the area will be coordinated with Colorado Division of Wildlife and other agencies responsible for wildlife management.

National Forest Management Act

This decision is also consistent with the National Forest Management Act and the requirements for management prescriptions and regulations found in 36 CFR 219.27.

Implementation Date

This project will be implemented on or after March 2007.

Administrative Review or Appeal Opportunities

This decision is not subject to administrative appeal.

Contact Person

For additional information concerning this decision or the Forest Service appeal process, contact Andy Cadenhead, Supervisory Forester, HPBE, 925 Weiss Drive, Steamboat Springs, CO 80487, 970-870-2220.

Jamie Kingsbury *March 14, 2007*

Jamie Kingsbury Date
Hahns Peak/Bears Ears District Ranger

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