White River Forest Health and Fuels Management Project

White River National Forest
Eagle, Garfield, Mesa, Pitkin, Rio Blanco, and Summit County, Colorado

Comments Welcome

The White River National Forest welcomes your comments on its proposal to implement a forest wide vegetation management project in Eagle, Garfield, Mesa, Pitkin, Rio Blanco, and Summit Counties. This project is currently being considered categorically excluded from documentation in an environmental assessment or environmental impact statement under *36 CFR 220.6 (e)(6) - Timber stand and/or wildlife habitat improvement activities that do not include the use of herbicides or do not require more than 1 mile of low standard road construction.* The proposal aims at improving forest health and perpetuating past management actions through:

- Continued management of live and dead fuels within previously created fuel breaks in the Wildland Urban Interface.
- Improving individual tree growth, vigor, and resiliency through reducing densities in naturally regenerating stands of young lodgepole pine.
- Reducing the extent of insects or diseases present in regenerating lodgepole pine stands.
- Continued diversity enhancement through maintaining and protecting young Engelmann spruce trees planted in areas affected by past spruce beetle outbreaks

This landscape level project is unique because of its condition-based approach that intends to authorize flexible management of forest vegetation in a timely manner. It is a different kind of analysis which is based on rapidly changing environmental conditions and is responsive to actual on-the-ground conditions. Analysis will occur using existing data and a narrow range of options, as well as engagement with stakeholders and the public. The White River National Forest will seek public, stakeholder and local government input during the initial scoping period for this project. Following an affirmative Decision on the project, the White River National Forest will outreach to local affected communities on a site-specific basis prior to implementation. The White River National Forest would maintain a contact list for ongoing public involvement throughout this project. If you, or your organization, would like to be included on this contact list please request the White River National Forest to add your contact information to this master list. In addition to maintaining a master list for ongoing correspondence and collaboration, the Forest would use other methods, such as news releases, social media, and public meetings to involve the local public, as appropriate for a given project. Following implementation, individual treatments would be monitored to determine responsiveness to resource objectives, effectiveness of project guidelines, and compliance with regulatory requirements. Annual monitoring results would be published on the forest's project webpage.

This comment period is intended to provide those interested in or affected by this proposal an opportunity to comment on the proposed action before the Responsible Official makes a decision.

Background

In response to a stand replacing disturbance, lodgepole pine typically naturally regenerates as dense forest often containing thousands of seedlings per acre. As these seedlings grow, competition with neighboring trees increases to a point where trees stagnate. Disturbance processes can be natural such as bark beetle outbreaks and wildfire, or they can be man-made through timber harvests.

From the mid-1980s through the mid-1990s the White River National Forest conducted timber harvesting activities that regenerated lodgepole pine stands across the forest. Many of these stands are currently over-stocked and are in need of density reduction treatments to reduce competition and promote individual tree vigor.

In addition to past management activities the lodgepole pine cover-type on the White River National Forest was recently affected by mountain pine beetle populations that reached epidemic levels. Mortality rates varied across the Forest, however in some areas mortality rates were high, resulting in 50% or more of the mature lodgepole pine being killed by the mountain pine beetle. In response to stand conditions resulting from the mountain pine beetle epidemic the White River National Forest has implemented, and will continue to implement, fuels reduction projects across the forest to preventatively protect private property, community infrastructure, and national forest resources and to provide for fire fighter safety. Overtime these completed fuel breaks have regenerated and are overly dense with current stocking levels exceeding 2,500 trees per acre. The desired stocking levels are between 150 and 1500 trees per acre.

Intermediate treatments, including thinning, can reduce tree density in these areas, which opens growing space, increases water and nutrient availability, can remove dwarf mistletoe, and increase tree vigor.

Purpose and Need for Action

The purpose of the proposed action is to:

- Improve forest health:
  - Improve individual tree growth, vigor and resiliency through reducing densities in young stands of lodgepole pine.
  - Improve or maintain forest health by reducing the extent of insects or diseases present in regenerating lodgepole pine stands.
- Maintain past management objectives:
  - Maintain existing fuel breaks with the Wildland Urban Interface (WUI) through managing live and down fuels.
  - Continue to enhance diversity through maintaining and protecting young Engelmann spruce trees planted in areas affected by past spruce beetle outbreaks.

The proposed action is needed because:

- Previously completed silvicultural treatments in the lodgepole cover-type have regenerated and are overly dense with current stocking levels exceeding 2,500 trees per acre. Desired stocking levels are between 150 and 1500 trees per acre.
- Lodgepole pine has regenerated or is expected to regenerate under partially dead canopies created by recent natural disturbances including wildfire and insect outbreaks. These conditions can create understories that are diseased, poorly developed and overly dense.
- Naturally regenerating subalpine fir is competing with Engelmann spruce trees planted in salvage harvest units.

Proposed Action

To address the purpose and need, the Forest Service is proposing to implement a maximum of 1,000 acres of vegetation management activities on National Forest System Lands annually until significant changes in conditions warrant a new analysis. Vegetation management activities include:

- Pre-commercially thinning previously managed stands that are fully stocked and are in need of density reduction.
- Target lodgepole pine stands that have been affected by natural disturbances including the recent mountain pine beetle epidemic or wildfire. Stands proposed for treatment would have fully stocked understories that are in need of density reduction.
- On specific sites it is also desirable to reduce the density of regenerating subalpine fir trees in areas that were previously harvested and planted with Engelmann spruce.

The Forest Service would prioritize areas to be treated on an annual basis. No thinning treatments would occur in Forest Plan Management areas 1.11 Pristine Wilderness, 1.12 Primitive Wilderness, 1.13 Semi-Primitive Wilderness or 1.5 Wild Rivers-Designated and Eligible. A pre-implementation checklist would be completed by Resource Specialists to identify any site specific conditions that may need to be addressed such as cultural sites or important wildlife habitat.

Silviculture Prescriptions

Depending on stand conditions, the proposed treatments would be accomplished utilizing one of the following prescriptions:

Prescription 1 – Pre-commercial Thinning

Thin overstocked stands to a residual stocking level of 300-1500 trees per acre. Favor retention of Engelmann spruce and subalpine fir trees over lodgepole pine trees. Retain existing aspen in groups where they exist within stands. Favor retention of trees with large diameters, good crown ratios and healthy branches over suppressed small diameter lodgepole pine. Either fell trees infected with insects or diseases or if feasible, prune infected branches. Residual tree spacing would generally range from 5x5 feet to 12x12 feet, with some variability in order to retain the most dominant trees. In stands that are 10 acres and larger,

retain 20% of the stand in un-thinned groups ½ acre in size to provide for snowshoe hare habitat. Stands that are less than 10 acres in size would not retain un-thinned groups.

This prescription would be applied to forested areas outside the Wildland Urban Interface (WUI), as described in a Community Wildfire Protection Plan (CWPP) and may occur within designated Colorado Roadless Areas. The overall objective of the treatment is to improve growth and individual tree vigor. The target residual tree density will be determined on an individual stand basis and would be based on a number of factors including the age of the existing trees, the current stand density, and forest plan management area direction. A variety of slash treatments, as described in the Implementation Methods section, may be applied to treated areas. Below are two examples of thinning treatments:

Example 1
A stand of trees within the suitable timber base that was harvested or impacted by a natural disturbance (mountain pine beetle, wildfire, wind/storm blowdown, etc.) in the late 1980s and has naturally or artificially regenerated would be pre-commercially thinned to a residual tree density of 400-600 trees per acre. Tree spacing would range from 8x8 feet to 11x11 feet. In this example trees are approximately 30 years old and have begun to compete with each other for resources. Reducing tree densities will reduce competition between trees and allow for improved vigor and tree growth.

Example 2
A stand of trees within the suitable timber base that was harvested or impacted by a disturbance (mountain pine beetle, wildfire, wind/storm blowdown, etc.) in the past 15 years and has naturally or artificially regenerated would be pre-commercially thinned to a residual tree density of 750-1200 trees per acre. Tree spacing would range 5x5 feet to 6x6 feet. In this example trees are less than 15 years old and although the numbers of seedling present are high, they are small and have not yet begun to compete with each other for resources. Retaining a higher residual density at this age will allow for continued vertical tree growth and will provide less competition between trees as they mature.

Prescription 2 – Pre-commercial Thinning WUI
Thin overstocked stands to a residual stocking level of 150-400 trees per acre on average. Stands that are proposed to be treated using this prescription would not retain un-thinned areas that provide for snowshoe hare habitat. Favor retention of Engelmann spruce and subalpine fir trees over lodgepole pine trees. Retain existing aspen in groups where they exist within stands. Favor retention of trees with large diameters, good crown ratios and healthy branches over suppressed small diameter lodgepole pine. Either fell trees infected with insects or diseases or if feasible, prune infected branches. Residual tree spacing would generally range from 10x10 feet to 16 feet x 16 feet, with some variability in order to retain the most dominant trees.

Overstocked stands that occur within 1,000 feet of private property would be thinned using a feathering technique, with the average number of trees per acre increasing as the distance from private property increases. Final residual stocking would meet Forest Plan Standards of 150 trees per acre.

Example:
In a previously treated fuel break that is 600 feet in width: thin the first 200 feet (closest to infrastructure/values) to a residual stocking of less than 50 trees per acre, thin the next 200 feet to a residual stocking of 100-150 trees per acre and thin the last 200 feet (furthest from infrastructure/values) to a residual stocking of 250-300 trees per acre.

This prescription would be applied to forested areas within the Wildland Urban Interface (WUI) as defined in a Community Wildfire Protection Plan (CWPP), or adjacent to sensitive infrastructure such as powerline corridors. These treatments may occur within designated roadless areas. The target residual tree density will be determined on an individual stand basis and would be based on a number of factors including the age of the existing trees, the current stand density, and forest plan management area direction. A variety of slash treatments, as described in the Implementation Methods section, may be applied to treated areas.

Prescription 3 – Tree Release and Weeding
Remove all trees within 15-30 feet of planted spruce trees. Final spacing would vary and would be dependent on the amount of subalpine fir present within the stand.

This prescription would be applied to approximately 585 acres of previously harvested areas located on the Aspen-Sopris Ranger District. These stands were harvested utilizing a salvage prescription following a spruce bark beetle outbreak in the late 1990s. Following harvesting activities, stands were planted with Engelmann spruce. Currently natural subalpine fir regeneration is competing with planted trees and there is a desire to reduce that competition in order to maintain stand diversity.

Treatment Methods

Depending on site and stand conditions, a variety of treatment methods may be used to achieve desired conditions.

Hand Treatments – Lop and Scatter
Thinning treatments would be conducted by hand crews utilizing chainsaws or similar hand operated equipment. Activity slash would be bucked into lengths less than 6 feet and scattered to a depth less than 18 inches.

Hand Treatments – Pile and Burn
Thinning treatments would be conducted by hand crews utilizing chainsaws or similar hand operated equipment. Activity slash piles would be created by hand and burned by the Forest Service.

Mechanical Treatment – Mastication or Chipping
Thinning treatments would be conducted using ground based mechanical equipment that may be wheeled or tracked. Activity slash would be chipped, mowed or masticated and left on site. Desired fuel depth would be less than 3 inches.

Mechanical Treatment – Removal
Thinning treatments would be conducted using ground based mechanical equipment that may be wheeled or tracked. Activity slash would be removed.

Treatment Area Selection
The Forest Service would prioritize areas to be treated on an annual basis. No thinning treatments would occur in Forest Plan Management areas 1.11 Pristine Wilderness, 1.12 Primitive Wilderness, 1.13 Semi-Primitive Wilderness or 1.5 Wild Rivers-Designated and Eligible. The number of acres to be treated annually would depend on funding, but would not exceed 1,000 acres. A pre-implementation checklist would be completed by Resource Specialists to identify any site specific conditions that may need to be addressed such as cultural sites or important wildlife habitat. Mechanical treatments would occur in areas that are adjacent to existing system road templates or in areas that do not require more than 1 mile of low standard road construction for the entire project area.

All proposed treatment areas within Colorado Roadless Areas have been previously treated using clearcut silviculture prescriptions. At this time the Forest Service has preliminarily identified approximately 600 acres of potential treatments within designated roadless areas across the Forest.

Implementation Process
The Proposed Action does not identify specific treatments areas, is based on the condition of the forest stand and not on specific identified treatment areas, and a well-defined process for implementation is needed. The following steps have been identified for implementation:

- Prior to implementation the forester or silviculturist will identify areas for treatment and prepare draft silvicultural prescriptions that document the chosen prescription, the desired residual stocking levels, and the preferred implementation method.

- Treatment areas and silvicultural prescriptions are presented to an interdisciplinary team (IDT) of resource specialists for completion of any necessary field surveys, such as cultural resource inventories or wildlife habitat surveys.

- The IDT will meet to discuss field survey findings and resource specialist recommendations. A pre-implementation checklist will be completed, documenting the resource review and compliance with design features. Silvicultural prescriptions are finalized.

- A news release will be prepared to inform the public about upcoming treatments. Feedback from the public concerning the specific treatment areas, or input concerning future treatment areas would be welcome.

- Projects will be implemented through appropriate mechanisms which may include service contracts, Forest Service employees or stewardship contracts. Whichever mechanism is chosen to implement the silvicultural prescription, a Forest Service

employee would oversee implementation to ensure compliance with design features and contract provisions.

- Post treatment surveys that monitor compliance with the silvicultural prescription will be conducted. Findings may be used to inform future treatments approved by the Decision. Annual monitoring results would be published on the forest's project webpage.

Management Direction

Forest Plan Goals and Objectives

The proposed action aligns with goals, objectives, and strategies from the 2002 White River National Forest Land and Resource Management Plan (Forest Plan pgs. 1-3 – 1-15) specifically;

Goal 1 Ecosystem Health
Promote ecosystem health and conservation using a collaborative approach to sustain the nation's forests, grasslands and watersheds.

Objective 1a – Improve and protect watershed conditions to provide the water quality and quantity and soil productivity necessary to support ecological functions and intended beneficial uses.

Objective 1d – Increase the amount of forest and rangelands restored to or maintained in a healthy condition with reduced risk and damage from fires, insects, disease and invasive species.

Strategy 1.d.7 – Implement management practices, including prescribed fire, that will move landscapes towards desired vegetation composition and structure as described in the management area description and the Historic Range of Variability.

Strategy 1.d.9 – Over the life of the plan, management practices that mimic ecological processes, such as fire insect and disease, and other disturbances, will operate on forest and grassland landscapes in a manner consistent with desired conditions and management area direction.

Objective 1e – Work cooperatively with individuals, organizations, local, state, tribal and other federal agencies to promote ecosystem health and sustainability across landscapes.

Goal 2 Multiple Benefits to People
Provide a variety of uses, products and services for present and future generations by managing within the capability of sustainable ecosystems.

Objective 2c – Improve the capability of national forest and rangelands to sustain desired uses, values, products and services.

Goal 5 Public Collaboration
Engage the American public, interested organizations, private landowners, state and local governments, federal agencies and others in the stewardship of National Forest System Lands.

Objective 5a – Work cooperatively with individuals and organizations, local, state, tribal, and federal governments to promote ecological, economic and social health and sustainability across landscapes.

Strategy 5a.1 – Provide opportunities for local governmental jurisdictions and other interested parties to participate in planning and management of National Forest System lands, especially where local governmental jurisdictions or other landowners are contiguous to or may be affected by the management of these lands.

Forest Plan Management Area Direction

The project will be designed to conform to the Forest Plan and all other laws, regulations and policies. Forest Plan standards and guidelines will be applied as appropriate to meet Forest Plan goals and desired conditions. The proposed action may occur across multiple Forest Plan management areas where appropriate except Forest Plan Management areas 1.11 Pristine Wilderness, 1.12 Primitive Wilderness, 1.13 Semi-Primitive Wilderness and 1.5 Wild Rivers-Designated and Eligible.

Nature of Decision to be Made

Preliminary review indicates this project may fall within a category of actions established by statute for timber stand improvement activities and is excluded from documentation in an Environmental Assessment (EA) or Environmental Impact Statement (EIS) per 36 CFR 220.6 (e)(6). A proposed action may be categorically excluded from further analysis and documentation in an EA or EIS only if there are no extraordinary circumstances related to the proposed action. The resource conditions that should be considered in determining whether extraordinary circumstances related to a proposed action that warrant further analysis and documentation in an EA or an EIS are:

1. Federally listed threatened or endangered species or designated critical habitat, species proposed for Federal listing or proposed critical habitat, or Forest Service sensitive species;
2. Flood plains, wetlands, or municipal watersheds;
3. Congressionally designated areas, such as wilderness, wilderness study areas, or national recreation areas;
4. Colorado Roadless Areas or potential wilderness areas;
5. Research natural areas;
6. American Indians and Alaska Native religious or cultural sites; and
7. Archaeological sites, or historic properties or areas.

The mere presence of one of these resource conditions in the project area does not preclude use of a CE. It is the existence of a cause-effect relationship between a proposed action and the potential effect on these resource conditions and if such a relationship exists, the degree of the potential effect of a proposed action on these resource conditions that determine whether an extraordinary circumstance exists (FSH 1909.15, Chapter 30 – Categorical Exclusion from Documentation).

For this project, the responsible official is the White River Forest Supervisor, Scott Fitzwilliams. The responsible official will review resource input and public comments in order to make the following decisions:

1. Do extraordinary circumstances exist that would warrant further analysis and documentation in an Environmental Assessment or an Environmental Impact Statement?

2. If no extraordinary circumstances exist and the proposed action proceeds as proposed:
   - What design features/mitigation measures and monitoring requirements should be applied to the proposed action?

Public Involvement

The project was first listed in the Schedule of Proposed Actions in December 2018 and updates are provided quarterly. Further information about this project can be found on our website at https://www.fs.usda.gov/project/?project=55257

Comment Process

The Forest is now soliciting comments on the proposed action. Your feedback on this proposal will assist in refining design features and identifying potential issues. Comments specific to the proposed action that identify a cause-effect relationship are most helpful.

The following options are available for submitting comments:

Electronic comments including attachments can be submitted to:
https://cara.ecosystem-management.org/Public//CommentInput?Project=55257

Hardcopy comments can be mailed, hand-delivered or faxed as follows:

Mail
White River National Forest
Attn: Shelby Limberis
PO Box 190
Minturn, CO 81645

Hand Deliver
White River National Forest Offices located in Glenwood Springs, Carbondale, Rifle, Meeker, Minturn, and Silverthorne.

Faxed to (970) 827-9343
Be sure to note on the cover page that comments are for the White River Forest Health and Fuels Management Project, Attn: Shelby Limberis.

Comments will be accepted any time, but will be most helpful if submitted prior to January 31, 2019. Names and contact information submitted with comments will become part of the public record and may be released under the Freedom of Information Act. Decisions that are categorically excluded from documentation in an Environmental Assessment (EA) or

Environmental Impact Statement (EIS) are not subject to an administrative review process (pre-decisional objection process) (Agriculture Act of 2014, Subtitle A, Sec. 8006).

Additional information regarding this action can be obtained from: Shelby Limberis, PO Box 190, Minturn, Colorado, 81645; by phone: (970) 827-5161; or by email: slimberis@fs.fed.us .