

Decision Memo

SPRUCE CREEK

HAZARDOUS FUEL REDUCTION PROJECT



USDA Forest Service
San Isabel National Forest
Salida Ranger District
Salida, Colorado
Chaffee County

Introduction

The Spruce Creek project area is located southwest of Poncha Springs in Chaffee County, Colorado within portions of T. 49 N., R.7 E., Sections 23, 24, 25, 26, 27 & 35. This area of the San Isabel National Forest Service is a mosaic of vegetation types ranging from mountain grasslands to mixed shrub communities to ponderosa pine and mixed conifer forests with pockets of aspen.

A mountain pine beetle outbreak has occurred in the ponderosa pine and Douglas-fir stands in the project area. This outbreak has killed up to 90% of the ponderosa pine in some stands and pine beetles are still active in stands containing ponderosa pine and Douglas-fir within the project area. Currently, the increased number of dead trees and the increasing dead and down material in the area poses an increased threat of a high intensity wildland fire occurring in the area.

The intent of this project is to reduce the risk of high intensity wildland fire and restore and maintain healthy, diverse, fire adapted ecosystems to provide improved resilience and sustainability. In addition the project will treat vegetation so that growth and vigor of residual trees are maintained or increased to favor the development of a large tree forest structure. Treating hazardous fuel accumulations will result in a landscape condition closer to the historical fire regime, improve Fire Regime Condition Class Rating and create stand conditions that allow for greater resistance of remaining stands to insect and disease outbreaks.

Proposed Action,

The Spruce Creek Hazardous Fuels Reduction Project will use a combination of mechanical fuels reduction and thinning (commercial and non-commercial) and prescribed fire (broadcast and pile) to reduce hazardous fuels. The proposed action will treat approximately 575 acres. Treatment types and acres are listed below.

Summary of Treatment Types

Treatment Type	Proposed Action (Approximate Acres)
No Treatment	191.0 acres
Mechanical Fuels(openings) & Pile RX Fire	156.0 acres
Mechanical Treatments	419.0 acres
<i>Salvage, Thinning & Prescribed Fire</i>	199.0 acres
<i>Thinning, Regeneration & Group Shelterwood</i>	171.0 acres
<i>Fuel Break Treatments</i>	49.0 acres
Total Acres (National Forest lands)	920.0 acres
Project Area-Total Acreage	920.0 acres
National Forest System Lands	766.0 Acres
Private lands within project area	154.0 acres

The proposed action will thin trees and remove dead material throughout the forested treatment units. The trees cut and removed from the thinning efforts will be utilized whenever possible (sawlogs, posts, stays, firewood, etc) or disposed of by burning (broadcast and pile). See Appendix A for a detailed description of the treatment prescriptions for each polygon.

The total analysis area is approximately 920 acres. The work will be accomplished by both Forest Service personnel and contractors.

Decision

I have decided to implement the actions listed above in the “Summary of Treatment Types” table and identified in Appendix A of this Decision Memo on the National Forest System lands within the Spruce Creek project area.

Design Criteria developed by the Interdisciplinary Team, will be followed to implement the project. A detailed description of the treatments and the associated design criteria are located in Appendix A of the Decision Memo.

Reasons for Categorically Excluding the Proposed Action

The environmental analysis concluded that this action falls within a category of actions, which normally do not individually or cumulatively have significant effect on the environment, and, therefore, can be excluded from documentation in an environmental analysis or environmental impact statement. This provision is in FSH 1909.15, Category 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.

Category 31.2 (10) applies in this case because the project area is within the Wildland Urban Interface (WUI) that borders private property in both the Little Cochetopa and Spruce Creek drainages. The project is consistent with all applicable land resource management plans, will not affect wilderness or proposed wilderness, and will not make use of herbicides, except for the treatment of noxious weeds, or result in new permanent infrastructure such as roads. A project

or case file is required for actions listed in Category 31.2. The project file will be maintained at the Salida Ranger District, Salida, Colorado.

Extraordinary Circumstances and Consistency with Other Laws

I find the proposed action can be categorically excluded because there were no extraordinary circumstances or issues identified by the interdisciplinary team of resource specialists that analyzed this proposal or during public scoping. Extraordinary circumstances considered in my evaluation, but dismissed with reasoning are as follows:

- *Threatened or endangered species or their critical habitat:* A Biological Evaluation for this action has been prepared. No potentially significant impacts to Federally listed threatened or endangered species or designated critical habitat, species proposed for Federal listing or proposed critical habitat, or Forest Service sensitive species were found.
- *Flood plains, wetlands, or municipal watersheds:* This project will not take place in a flood plain or in a municipal watershed. The project is anticipated to have minimal to no impacts on wetlands and riparian areas. Identified wetlands and riparian areas will be protected from impacts from the proposed action
- *Congressionally designated areas (such as wilderness, wild and scenic rivers, etc):* No actions will occur in Wilderness or Wilderness Study Areas.
- *Roadless areas (wild and scenic study rivers, etc):* There are no roadless areas located within the analysis area.
- *Research Natural Areas:* There are no Research Natural Areas located within the analysis area.
- *Native American Religious or Cultural Sites, Archaeological Sites, or Historic Properties or Areas:* Archeologists have reviewed the affected area for Native American religious and cultural sites, archaeological sites and historic properties. Known sites will be protected from impacts from the proposed action.

Public Involvement

Beginning on March 13, 2007, the Spruce Creek area was mentioned in the Mountain Mail Newspaper in Salida, CO as a potential area for fuels reduction treatments. On March 9, 2007, a Legal Notice was published in the Mountain Mail discussing the opportunity to comment on and eligibility for appeals of the project.

A proposal for the hazardous fuel reduction project was listed in the Schedule of Proposed Actions on December 31, 2006. A "scoping letter" identifying this proposal and soliciting public comments and participation in the planning process was mailed on March 7, 2007 to about 76 addresses. The list included surrounding property owners, citizen organizations, environmental groups, government agencies, local media, and individuals who had expressed interest in this project. The list of individuals, groups, organizations, and agencies that were notified of the proposed project and invited to comment on it, may be found in the project file located at the Salida Ranger District Office.

Issues raised during public involvement included the use of and closure of project created roads, slash piling and burning, mountain pine beetles, range improvement, and wildlife issues. These comments are considered in this decision and the responses to these comments are located in Appendix B.

Findings Required by Other Laws

The proposed action is consistent with the Pike and San Isabel National Forests, Comanche and Cimarron National Grasslands Land and Resource Management Plan (1984) as required by the National Forest Management Act. The project was designed in conformance with Forest Plan standards and incorporates appropriate Forest Plan guidelines for the protection of forest resources. The project is also in conformance with Forest Plan management area standards and guidelines for the following Management Areas:

Pike/San Isabel National Forests Land and Resource Management Plan	
5D-Managing forage and cover on Big Game winter ranges.	pp. III – 149 - 153
9A-Riparian Area Management	pp. III – 206 - 207
9B-Increased Water Yield	pp. III - 219

This proposed action complies with other laws and regulations applicable to actions undertaken on the national forests, including but not limited to the Clean Water Act, Clean Air Act, National Historic Preservation Act, Executive Order 12898 Environmental Justice, and the Endangered Species Act.

The Little Cochetopa Allotment Management Plan manages grazing allotments in the analysis area.

Implementation Date

This project could be implemented as early as 5 days after the end of the 45 day appeal period.

Administrative Review or Appeal Opportunities

This decision is subject to appeal pursuant to 36 CFR 215.11. A written appeal must be submitted within 45 days following the publication date of the legal notice of this decision in the *Mountain Mail*, published daily in Salida, Colorado. It is the responsibility of the appellant to ensure their appeal is received in a timely manner. The publication date of the legal notice of the decision in the newspaper of record is the *exclusive* means for calculating the time to file an appeal. Appellants should not rely on date or timeframe information provided by any other source.

Sec. 215.13 Who may participate in appeals.

- (1) Any person or group who submitted written comment in response to a project draft; or
- (2) Provided comment or otherwise expressed interest in a particular proposed action by the close of the comment period specified in Sec. 215.6.

Appeal filing for District Ranger decisions:

USPS, UPS, FedEx/hand-carry

USDA Forest Service, Region 2
Attn: Appeal Deciding Officer
740 Simms St.
Golden, CO 80401-4790

FAX : 303-275-5134

EMAIL: appeals-rocky-mountain-regional-office@fs.fed.us

Appeal Content Requirements

It is an appellant's responsibility to provide sufficient activity-specific evidence and rationale, focusing on the decision, to show why the Responsible Official's decision should be reversed. At a minimum, an appeal must include the following (CFR 215.14):

1. Appellant's name and address (CFR 215.1) with telephone number, if available;
2. Signature or other verification of authorship upon request (a scanned signature for electronic mail may be filed with the appeal);
3. When multiple names are listed on an appeal, identification of the lead appellant (CFR 215.2) and verification of the identity of the lead appellant upon request;
4. The name of the project or activity for which the decision was made, the name and title of the Responsible Official, and the date of the decision;
5. The regulation under which the appeal is being filed, when there is an option to appeal under either this part of part 251, subpart C (CFR 215.11d);
6. Any specific change(s) in the decision that the appellant seeks and rationale for those changes;
7. Any portion(s) of the decision with which the appellant disagrees, and explanation for the disagreement;
8. Why the appellant believes the Responsible Official's decision failed to consider the substantive comments; and
9. How the appellant believes the decision specifically violates law, regulation, or policy.

Notice of appeal that do not meet the requirements of 36 CFR 215.14 will be dismissed.

If no appeal is filed, implementation of this decision may occur on, but not before, 5 business days from the close of the appeal filing period. If an appeal is received, implementation may not occur for 15 days following the date of the appeal disposition.

Contact Person

For additional information concerning this decision, contact Sam Schroeder, Forester, Salida Ranger District.

Address: Salida Ranger District, 325 West Rainbow Blvd., Salida, Colorado 81201

Phone: (719) 530-3969

Email: sschroeder@fs.fed.us

//signed//

11/19/07

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William A. Schuckert

Date

District Ranger
Salida Ranger District
San Isabel National Forest

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Appendix A**Spruce Creek Forest Health and Hazardous Fuels Treatment Project****Date: October 1, 2007****Description of the Treatment Prescriptions**

No Treatment (191 acres): *Polygons: 2602, 2603, 2604, 2624, 2629, 2632, 2633, 2634, 2636*

Actions currently permitted and actions approved on earlier decisions will continue as authorized.

Mechanical Treatment-Openings & Prescribed Fire (156 acres): *Polygons: 2606, 2607, 2608, 2609, 2610, 2611, 2616, 2620, 2690.*

The objective of the mechanical treatments is to create 1-2 acre openings in the pinyon-juniper type in order to reduce fuel concentrations and alter fire behavior. Prescribed fire, primarily pile burning, would be used to reduce this hazardous fuel accumulation and promote regeneration of grass & forbs within these openings.

A prescribed fire plan and appropriate smoke permits will be completed and approved prior to burning. The prescribed fire plan will address such items as unit delineation, weather parameters, necessary holding resources, sensitive areas (i.e. power lines, highways, and improvements), public safety, and smoke concerns. Prescribed burning of individual units will likely be completed in 2 to 3 days, with residual smoke lasting 3 to 5 days.

Pile burning will take place in areas where broadcast burning is not desired or where fuels must be reduced prior to broadcast burning (ie. fuel breaks). The average size of hand piles is 6 feet x 6 feet x 6 feet. The average size of mechanical piles is 6 feet x 6 feet x 10 feet. The burning of the piles usually takes place in the winter months. Preparation work may be needed to ensure the prescribed burn is maintained within the prescription set forth in the prescribed fire plan. Examples of preparation work include the construction of hand lines and the removal of brush. Where available, natural and existing fuel breaks will be used.

Salvage, Thinning, Prescribed Fire (199 acres):

Ponderosa pine/Douglas-fir/Aspen (approximately 199 acres): *Polygons: 2600, 2605, 2612, 2687, 2689, 2691, 2692.*

Dead stands of ponderosa pine/Douglas-fir and ponderosa pine/Douglas-fir trees infected with insect and disease may be harvested and removed from the area. In areas of heavy mountain pine beetle activity, infested trees will be removed and remaining trees may be thinned, if needed, to maintain the residual mature stand. Methods of removal include but are not limited to chainsaws, harvesters, skidders, dozers and log trucks.

Stands of healthy ponderosa pine/Douglas-fir (stands that have minimal or no insect or disease infestation) may be thinned to reduce overall stand density and improve the health and vigor of the remaining trees. Feed trees, nest trees and clumps around trees used by Abert's squirrels will be retained.

The desired result will be less than 40% canopy closure. The desired basal area (BA) for Polygon 2605 will be an average of 50 square feet/acre; Polygons 2600 and 2612 will vary from 60-100 BA/Acre; and Polygons 2687, 2689, 2691, & 2692 will likely be less than 40 BA/Acre. Existing regeneration needed for desired stocking levels will be protected where practical.

After harvesting is complete, the slash and hazardous fuels in the area may be reduced through fuelwood gathering and/or prescribed fire. Prescribed fire includes pile burning, broadcast burning or a combination of both. A prescribed fire plan and appropriate smoke permits will be completed and approved prior to burning. The prescribed fire plan will address such items as unit delineation, weather parameters, necessary holding resources, sensitive areas (i.e. power lines, highways, and improvements), public safety, and smoke concerns. Prescribed burning of individual units will likely be completed in 2 to 3 days, with residual smoke lasting 3 to 5 days.

Pile burning will take place in areas where broadcast burning is not desired or where fuels must be reduced prior to broadcast burning (ie. fuel breaks). The average size of hand piles is 6 feet x 6 feet x 6 feet. The average size of mechanical piles is 6 feet x 6 feet x 10 feet. The burning of the piles usually takes place in the winter months.

Preparation work may be needed to ensure the prescribed burn is maintained within the prescription set forth in the prescribed fire plan. Examples of preparation work include the construction of hand lines and the removal of brush. Where available, natural and existing fuel breaks will be used.

Thinning, Regeneration Harvest (Patch Cuts & Group Shelterwood) & Prescribed Fire (171 acres):

Lodgepole Pine and Lodgepole Pine/Aspen Mix (171 acres): Polygons: 2625, 2626, 2627, 2630, 2637, 2672, 2686.

Lodgepole pine stands may be harvested using thinning, group shelterwood, and patch cuts. Thinning would reduce the stocking level to 70-90 SF Basal Area/acre favor leaving the healthiest, dominant, and most wind-firm trees. Patch cuts of less than 15 acres and/or a group shelterwood system would be used in areas of dwarf mistletoe in the lodgepole pine and/or in areas where aspen and/or lodgepole pine could be regenerated. The goal is to regenerate approximately 1/3 of the stand, thin/group shelterwood 1/3 of the stand, and do no treatment on the remaining 1/3 of the stand.

Within Polygons 2625, 2626, 2628, and SE portion of 2630, aspen restoration will be emphasized. Treatments would be patch cuts on 1/3 of the area and removal of encroaching conifers on the remaining area.

After harvesting is complete, the slash and hazardous fuels in the area may be reduced through fuelwood removal and/or prescribed fire. Prescribed fire includes pile burning, broadcast burning or a combination of both.

Fuel Break Treatments (approximately 49 acres): Polygons: 2621, 2624, 2625, 2626, 2627, 2628, 2691, 2692, 2872, 2873.

Objective of this treatment is to create a "filtered" fuel break along the adjacent private lands. Forested stands would be thinned to approximately 30 square feet of basal area per acre for approximately 400 feet from the private land boundary. Natural openings, ridgelines and other fire control features will be utilized where possible in the design and layout of these fuel breaks. After harvesting is complete, the slash and hazardous fuels in the area may be reduced through fuelwood gathering and/or prescribed fire. Prescribed fire includes pile burning, broadcast burning or a combination of both. See the section on prescribed fire for more details.

Road System

Existing county and USFS system roads would be used as much as possible to access the project area. These roads would be maintained as needed for safety and environmental considerations. No new system roads would be constructed in association with the proposed project. Within the project area, there are 9.7 miles of existing system roads. No system roads in the project area would be decommissioned after the project is complete.

Less than one mile of existing non-forest system roads and closed road miles would be used to access treatment areas. All non-system, re-opened closed roads, and temporary roads would be closed and obliterated once the project is complete.

Spruce Creek Forest Health and Hazardous Fuels Treatment Project

Summary of Treatment Types

Treatment Type	Proposed Action (Approximate Acres)
No Treatment	191.0 acres
Mechanical Fuels(openings) & Pile RX Fire	156.0 acres
Mechanical Treatments	419.0 acres
<i>Salvage, Thinning & Prescribed Fire</i>	199.0 acres
<i>Thinning, Regeneration & Group Shelterwood</i>	171.0 acres
<i>Fuel Break Treatments</i>	49.0 acres
Total Acres (National Forest lands)	920.0 acres
Project Area-Total Acreage	920.0 acres
National Forest System Lands	766.0 Acres
Private lands within project area	154.0 acres

Treatment Summary by Cover Type

Treatment by Cover Types	Proposed Action (Approximate Acres)
No Treatment	191.0 acres
<i>Grasslands/Mountain Mahogany/Sage</i>	135.0 acres
<i>Aspen</i>	56.0 acres
Mechanical Fuels (Openings) & Pile Rx Fire	
<i>Pinyon/Shrub</i>	156.0 acres
Mechanical Treatments	419.0 acres
<i>Salvage, Thinning & Prescribed Fire</i>	199.0 acres
<i>Ponderosa Pine/Douglas-fir/Aspen</i>	52.9 acres
<i>Thinning, Regeneration Harvest</i>	171.0 acres
<i>Lodgepole pine</i>	171.0 acres
Fuelbreak	49.4 acres
<i>Grassland/Sage</i>	11.0 acres
<i>Mixed Conifer/Aspen</i>	38.4 acres
Total Acres (National Forest lands)	766.0 acres
Private Land In-Holdings	154.0 acres
Project Area-Total Acreage	920.0 acres

Spruce Creek Forest Health and Hazardous Fuels Treatment Project
Treatment Summary by Polygon Number

Polygon Number	Cover Type	Acres	Treatment
2602	Grassland/Sage	9.5	No Treatment
2603	Grassland/Sage	23.1	No Treatment
2604	Grassland/Sage	89.9	No Treatment
2624	Grassland/Sage	5.8	No Treatment
2629	Grassland/Shrub	12.2	No Treatment
2632	Aspen/Grass	13.6	No Treatment
2633	Aspen/Grass	2.1	No Treatment
2634	Aspen/Grass	16.4	No Treatment
2636	Aspen	18.8	No Treatment
		(191.4)	
2625	Mixed Conifer/Aspen	5.0	Fuelbreak
2626	Mixed Conifer/Aspen	5.2	Fuelbreak
2627	Mixed Conifer/Aspen	3.5	Fuelbreak
2628	Mixed Conifer/Aspen	13.5	Fuelbreak
2691	Mixed Conifer/Aspen	2.9	Fuelbreak
2692	Grassland/Shrub	3.1	Fuelbreak
2872	Grassland/Shrub	1.1	Fuelbreak
2873	Mixed Conifer/Aspen	8.3	Fuelbreak
		(49.4)	
2606	Pinyon/Shrub	16.8	Mechanical/RX
2607	Pinyon/Shrub	15.0	Mechanical/RX
2608	DF/Mixed Conifer	18.9	Mechanical/RX
2609	DF/Mixed Conifer	6.5	Mechanical/RX
2610	Pinyon/Shrub	30.7	Mechanical/RX
2611	Pinyon/Shrub	28.8	Mechanical/RX
2616	Pinyon/Shrub	28.5	Mechanical/RX
2620	Grassland/Sage	2.6	Mechanical/RX
2690	Mixed Conifer/Aspen	7.7	Mechanical/RX
		(155.5)	
2625	Mixed Conifer/Aspen	14.9	Thin, Regen Cuts
2626	Mixed Conifer/Aspen	4.9	Thin, Regen Cuts
2627	Mixed Conifer/Aspen	33.0	Thin, Regen Cuts
2630	Mixed Conifer/Aspen	11.5	Thin, Regen Cuts
2637	Lodgepole pine	38.6	Thin, Regen Cuts
2672	Lodgepole pine	26.1	Thin, Regen Cuts
2686	Lodgepole pine/Aspen	42.4	Thin, Regen Cuts
		(171.4)	
2600	Mixed Conifer/Aspen	53.4	Salvage, Thin, RXFire
2605	PP/DF/Aspen/Sage	63.3	Salvage, Thin, RXFire
2607	PP/DF/Aspen/Sage	1.9	Salvage, Thin, RXFire
2612	Mixed Conifer/Aspen	38.0	Salvage, Thin, RXFire
2687	Mixed Conifer/Aspen	8.9	Salvage, Thin, RXFire
2689	Mixed Conifer/Aspen	9.7	Salvage, Thin, RXFire
2691	Mixed Conifer/Aspen	19.8	Salvage, Thin, RXFire
2692	PP/DF/Aspen/Sage	5.8	Salvage, Thin, RXFire
		(199.0)	
	Total	766.0	

Design Criteria:

1. Protect current improvements including fences, and spring developments. Range improvements would be protected and replaced, if damaged by treatment.
2. If chipping is used as a means of disposal, chips would be distributed so that the chip layer is a maximum of 2 inches in depth; otherwise the chips would be hauled off site.
3. Wood chips may be used on identified cultural sites to retard erosion and increase effective moisture, encouraging the growth of grasses and small forbs that act as stabilizing agents. The depth of the chips would be determined by the Zone Archeologist. The Zone Archeologist would supervise and monitor these activities.
4. All eligible archeological sites, including a minimum of 30 – 50 foot buffer (depending on slope and fuel loading), would be avoided and protected from damage by equipment traveling in the area and pile burning activities. The Zone Archeologist would determine the buffer and mark the area.
5. The Zone Archeologist would identify areas where prescribed fire is not allowed, to avoid impacts to eligible sites. In areas with eligible sites, the Zone Archeologist would assist in identifying staging areas to avoid impacts to sites.
6. If heavy fuel loads exist on any of the archeological sites for which avoidance is stipulated, then those fuels may be removed with an archeologist present.
7. If artifacts, features, or other indications of previously unrecorded heritage resources are identified in the course of ground-disturbing activities, all work in the vicinity of those materials would cease and the Zone Archaeologist would be notified immediately.
8. Nesting/Denning sites would be reported to the Wildlife Biologist and appropriate protection measures would be implemented.
9. If new site information regarding threatened, endangered, and sensitive species is located during the course of ground disturbing activities all work in the vicinity of those species would cease and the appropriate specialist would be notified.
10. An activity exclusion area would be marked by the Wildlife Biologist and avoided around known active raptor nests from March 1 through September 30.
11. If treatments are proposed within any raptor territory, the Wildlife Biologist would work with managers to determine treatment specifications for protection of that site.
12. Avoid operating equipment on slopes greater than 40%. Use designated skid trails on slopes between 25 and 40%; a hydrologist or soil scientist along with a sale administrator and a roads specialist (civil engineer or civil engineer technician) will be part of the team that lays out the designated skid trail route(s).
13. A minimum 100-foot buffer would define the Water Influence Zone (WIZ). The WIZ includes the geomorphic floodplain, riparian ecosystem, and inner gorge. The WIZ would be maintained on either side of perennial and intermittent streams and ephemeral areas as specified in the Watershed Conservation Practices Handbook (FSH 2509.25, Chapter 10).
14. Mechanical thinning treatments would not occur inside the WIZ as delineated by a Fisheries Biologist or Hydrologist. If the area has not been delineated, then treatments would occur outside a 100-foot buffer from all perennial and intermittent streams. The 100-foot WIZ also applies to all lakes, ponds, kettles and other forms of standing water. Some activities such as prescribed burning and hand treatments may be allowed in the WIZ, but only after consultation and concurrence with the project Hydrologist or Fishery Biologist.

15. Prescribed burning would be allowed to migrate into the WIZ from adjacent slopes, but would not be encouraged to do so; ignition of prescribed fire would not occur in the WIZ.
16. Heavy equipment and vehicles would be kept out of the WIZ, streams, swales, and lakes, except to cross at designated points, building crossings, conduct restoration work, or if protected by at least 1 foot of packed snow or 2 inches of frozen soil. Before heavy equipment or vehicles would be allowed to cross streams, the project Fishery Biologist or Hydrologist would be consulted and determine where crossings would occur or be constructed, and to specify any stipulations necessary to minimize negative impacts on aquatic resources.
17. Avoid soil disturbing activities during periods of wet soils. Operate heavy equipment only when soil moisture is below the plastic limit. Apply travel restrictions to protect soil and water when needed. Mechanical treatments prior to May 31 will require clearance from the hydrologist, soil scientist or road specialist.
18. Conduct prescribed fires to minimize residence time on the soils while meeting burn objectives.
19. In the treatment area with Ustic Torriorthents soil type, and slopes greater than 40% (parts of treatment polygons 2610, 2611, 2612, and 2616), because of the erosion hazard, low available water capacity, and low inherent fertility, tree removal should be accomplished by hand, only.
20. Construct firelines, reclaim firelines and disturbed sites created by pile burning and areas that burn at high intensity per the sediment control measures described in the WCP handbook (USDA, 2006).
21. Construct water bars, reclaim all skid trails and logging decks per the sediment control measures described in the WCP handbook. Control erosion and discharge from all log landings decks.
22. If machine piling of slash is done, conduct piling to leave topsoil in place and to avoid displacing soil into piles or windrows. Mechanical piling will be kept to a minimum and the majority of piling, pile burning and yarding of slash should be carried out when the ground is frozen or when there is at least one foot of snow on the ground.
23. Properly dispose of slash and other debris associated with mechanical preparations and treatments. Be sure to keep all such debris out of all riparian areas including perennial and intermittent streams, and ephemeral draws.
24. If a unit has previously been mechanically thinned / treated, no salvage treatment would take place after prescribed fire treatments occur.
25. Protect or provide for one Abert's squirrel nest tree clump (0.1 acre of 9 to 22 inch dbh ponderosa pine with a basal area of 180 to 220, if available, and interlocking canopy) per six acres on ponderosa pine (Forest Plan, pg. III – 29). In addition, all ponderosa pine trees showing sign of Abert's squirrel feeding activity would be retained as wildlife trees. This direction would be written into timber prescriptions and the prescribed fire plan. For the prescribed fire, protection measures include avoiding to the extent possible torching of ponderosa pine clumps and Abert's squirrel feed trees.
26. Implementation and effectiveness monitoring would be conducted by an interdisciplinary team. Snag, down woody material, and other stand conditions would be monitored pre and post treatment to ensure desired conditions are achieved. The following snags/down wood guidelines would be followed.

Snags and CWD

In forested areas, maintain greater than or equal to 40 snags/recruitment trees per 5 acre average; retain the largest sizes and numbers available (all stages of development). These should consist of at least 30 snags and/or down logs per 5 acres and 10 recruitment snags (green trees) per 5 acres. Guidelines for snags include:

- Retain all soft snags (class 3, 4, and 5) except for safety hazards (Forest Plan, pg. III – 12) to the greatest extent reasonable and practical.
 - Retain hard snags (when they are present) greater than or equal to 12 inches diameter at breast height (dbh) or as large as available.
 - If above existing snag levels are not available, provide for green recruitment snag trees sufficient to bring snag/recruitment snag levels up to the above mentioned levels in a well distributed manner of both clumps and individual trees, favoring largest available trees. Trees with defects (e.g. “wolfy” appearance, dead tops, forked tops, cankers, heartrot, knarls, diseases, broken tops and large limbs) would be selected when possible as follows:
 - Provide for the above number of recruitment snags (live trees)
 - Create new snags by burn plan design or other means, as necessary.
 - Protect reserved snags/down logs from fuelwood cutting, mechanical treatment and prescribed fire treatment to the greatest extent reasonable and practical.
 - In treatment units designated as fuel breaks, the above snag requirements would not be implemented. Adjacent units or portions of units untreated for fuel break prescriptions would retain an increased number of snags/cwd/green recruitment trees to make up for the acres designated as fuelbreak. These areas would be monitored by the wildlife biologist and fuels specialist to assure that the dead and down component is within acceptable levels for hazardous fuels reduction.
27. Gates and/or barricades would be installed on temporary roads to restrict use by the public during operations and/or until final road closures occur.
28. Access routes would be designated within public firewood areas.
29. Only administrative and permitted access would be allowed on new temporary roads and previously closed roads. Access points would be barricaded/gated during the implementation phase.
30. Seasonal implementation restrictions would be implemented for the project area December 1-April 1 for big game winter and transitional range protection. Low frequency activities, ie prescribed burning, would be coordinated with the Wildlife Biologist on an as-needed basis prior to implementation.
31. Temporary roads used during the project activities would be closed and/or obliterated by ripping and seeding with native species, then signed to inform the public that vegetative restoration is in progress. Road closures would occur within six months after completion of the treatment(s) in that unit.
32. In forested areas, a 200-foot buffer would be maintained along 75% or more of each side of County Road 214 and FDR 214A and 214B to discourage and minimize off-road vehicles (OHV) use and maintain visual screening for wildlife. Mechanical treatment would not take place in the buffer, but prescribed fire may be allowed; hazard trees may be mechanically removed (Forest Plan, pg. III-32).

33. Aspen regeneration will be monitored. If aspen regeneration is found to be adversely impacted by either livestock or elk grazing pressure, those units will be fenced or otherwise protected to promote regeneration.
34. Deferment of grazing in burned areas would occur for at least one growing season. Timing of prescribed fire treatments would be coordinated with the Rangeland Management Specialist to avoid conflicts with permittees and stress on the vegetation.
35. To reduce risk of spreading noxious weeds, coordinate with the Noxious Weed program manager prior to implementation. Heavy equipment would be cleaned and inspected prior to entering the project area. Treatment areas would be monitored pre and post treatment for noxious weeds. If present, avoid or remove sources of weed seed and propagules to prevent establishment of new weed infestations and spread of existing weeds. Weed locations would be sent to the Noxious Weeds Coordinator and scheduled for treatment.

Appendix B-Response to Comments**Spruce Creek Forest Health and Hazardous Fuels Treatment Project**

Respondent: Colorado Wild

Comment 1: Commendably, the project's emphasis is on prescribed fire... We note with some concern, however, that some of the burning would be piles,... These vegetation types depend on fire to some degree to create favorable conditions for regeneration and maintenance.

Response: Thank you, Rocky for your comments. Prescribed fire has been incorporated into the project design as outlined in Appendix A of the Decision Memo. The goal of the broadcast burning is to provide diversity within the forest vegetation types of the area. Fire will encourage regeneration of all the species, especially aspen. Through our analysis by the ID Team the amount of broadcast burning has been reduced by 159 acres. This was done to protect the sagebrush habitat that exists for the Gunnison Sage Grouse in the center of the project. Broadcast burning is still planned in other units. In units that will require slash piling for the fuelbreaks, and openings in the pinyon, hand piling is the preferred method. This will minimize the intensity and heating of the soils beneath the piles. Also, burning of the piles will be done when there is snow on the ground.

Comment 2: Slash burning must be done cautiously... But burning large piles can create a long-lasting heat pulse in the soil below, which then sterilizes the soil beneath the piles by killing all microorganisms and volatilizing nutrients... We recommend that if slash is piled, that piles be created by hand...

Response: As stated above, areas planned for slash piling will be done by hand stacking and burned in the winter months. Other areas will have the slash lopped and scattered in order to minimize heavy fuel loadings prior to broadcast burning of these units. This will reduce the intensity of the fire traveling through the units.

Comment 3: Protect wildlife and plants. Before cutting or burning, the Forest service should survey the area for wildlife and plants... We recommend retention of almost all soft snags... and retaining a total of several snags per acre averaged over the project area...

Response: All wildlife and botanical surveys have been completed for the project. Design criteria that address the retention of snags are listed in Appendix A.

Comment 4: Fight noxious weeds... Follow-up surveys and eradications should be done for three years after the project is complete.

Response: The area has been surveyed for noxious weeds. We will follow the Forest-wide Noxious Weed Plan and schedule treatment in the area as needed.

Comment 5: The proposed categorical exclusion may not be applicable to the project area...be[en] identified through collaborative framework as described in “A Collaborative Approach for Reducing Wildland Fire Risks to Communities and Environment 10-Year Comprehensive Strategy Implementation Plan”. FSH 1909.15 Chapter 31.2 Parts of the project are about one mile from private land, and thus not in the WUI...

Response: A Community Wildfire Plan has not been completed for the Little Cochetopa drainage. The majority of the treatment units are within one mile of private property. The southern treatment units will complement the fuelbreaks and forest health treatments that are on-going on the State and private lands that border the project area. Through the scoping process and collaboration with the Colorado State Forest Service, support for expanding fuel breaks and vegetation treatments through this project is present.

Respondent: Trotter Family Partnership

Comment: ...referring to the enclosed map is not clear what the darker chartreuse coded polygons adjoining our property at the end of CR 210 signify...Is it possible that Polygons 2624, 2692, 2872 and 2873 have been designated Fuelbreak....

Response: The project map has been corrected and better defined for the treatments. Also, each polygon and the treatments are listed in Appendix A of the Decision Memo.

Respondent: Colorado State Forest Service

Comment 1: ...encourage all live tree cutting in ponderosa pine and Douglas-fir, mountain pine beetle flight periods, particularly July and August...A fuel break adjacent to private and state land is welcomed, however bark beetle caused tree mortality on non-federal land due to treatment timing could negate some of the goodwill created by the fuel break and financially impact landowners.

Response: Every effort will be made to minimize the spread of the mountain pine beetles in the project area through the treatment unit design, implementation schedules, and contract requirements. The project has 49 acres of fuel breaks planned that will complement the efforts and work that has been completed on the State and private lands.

Respondent: Scanga Ranch

Comment: The Scanga Ranch is in favor of these projects. We are disappointed that range improvement was not listed as one of the needs for these projects. We hope that the slash in the mechanically treated areas will be reduced to a point where cattle can freely move through the treated areas.

Response: Although not identified as a driving issue for this project, the range conditions and forage production are expected to improve from the treatments planned. Thinning of the forest and broadcast burning should increase the forage available for both cattle and wildlife. The slash will be lopped and scattered to below 24 inches and the burned, thus minimizing any restrictions for cattle and wildlife movement through the area.

Respondent: Lynn and Jackie Shank

Comment: ...we are anxious for the cleaning and thinning of that area and others to occur, and would like to participate in some small degree in that process.

Response: Thank you for your comments on the project. Opportunities to gather firewood or other forest products will be available to the public as part of the implementation plan.

Respondent: Upper Arkansas Motorized Recreation Coalition

Comment: The individual and organization members of the Upper Arkansas Motorized Recreation Coalition support the above referenced fire mitigation projects to promote improved forest health and for the betterment of multiple use on Public Lands.

Response: Thank you for your comments.

Respondent: Colorado Division of Wildlife

Comment: Although your primary focus on the project is to reduce hazardous fuels and fire threat levels, we commend them as habitat improvements...Our only concern with these projects is in reference to the temporary roads which are designated, as well as any other logging and skidding roads that will develop during the treatments...We recommend that access to these roads be mechanically destroyed after treatment, that closures be signed, and that enforcement of these closures occur.

Response: We agree that a secondary benefit of the project will benefit the wildlife habitat in the area. The majority of the project area has been designated 5B-Winter Range in our Forest Plan. Also, design criteria (Appendix A) have been developed for the project that addresses the temporary road closures and seasonal restrictions for your wildlife issues.