1. DESCRIPTION OF PROJECT

This notice presents the purpose and need, proposed action, alternatives, environmental analysis, schedule and comment directions for the Trout-West Phase 2 Environmental Assessment (EA). This project is proposed by the US Forest Service, Pike National Forest, Pikes Peak Ranger District in Colorado. Map 1 displays the project area and location of the Trout West Phase 2 EA. This project is the second phase of forest restoration within this area of the Pike National Forest.

The National Forest lands proposed for treatment are high priority because they are at high risk of catastrophic losses from wildfire. The project area is located within the "red zone" as defined by the Colorado State Forest Service in 1999. The red zone identifies areas of extreme fire hazard to surrounding communities.

The Trout-West area contains a readily accessible municipal watershed for the community of Woodland Park, as well as major tributaries to the South Platte River and the Denver municipal water supply. The Trout-West Phase 2 Project proposes methods such as thinning and prescribed burning to reduce the canopy density and ground fuels throughout the project area.

High fire hazard was also identified as a serious concern for the Trout and West Creek watersheds in the Upper South Platte Watershed Landscape Assessment (Foster Wheeler 1999), due to the vegetation conditions and fire history of the area.

Management direction guiding the proposed project is contained within the Pike and San Isabel National Forests; Comanche and Cimarron National Grasslands Land and Resource Management Plan (Forest Plan) (USDA 1984).

2. PURPOSE AND NEED

Fuels need to be treated within the Trout-West Phase 2 project area to reduce the potential adverse effects of wildfire and provide for firefighter and public safety. Much of the Trout-West Phase 2 area contains forests that burn hotter than historic forests (Kaufmann et al. 2001; Kaufmann et al. 2000; Kaufmann et al. 1999; Brown et al. 1999). Nearby, recent fires have led to catastrophic losses of life, watershed values, homes, property, and wildlife habitat. Without action, continued catastrophic losses from wildfire are predicted.

The risk of these effects from wildfire is high (and increasing) within the Trout and West Creek watersheds. The watersheds are important to residents, visitors, and the city of Denver as part of their municipal water supply. Many private homes and subdivisions are nestled within overly dense forests. Approximately 20,000 people live in the Trout and West Creek watersheds and many more use the National Forest for recreation and other needs. In the past ten years, population has increased by over a million people within a two-hour drive of the project area. As population increases, so do the chances for a human-caused fire. Lightning also has the potential to cause damaging wildfires. The project area averages six to 20 lightning strikes (cloud to ground) per square mile annually.

The type, density, and structure of the wildland vegetation, as well as the amount of down, dead material determine the type of fire behavior and associated hazard. Generally, the potential for high intensity crown fire increases with the density and continuity of forest canopy.

The National Fire Plan uses the concept of Fire Regime Condition Class to characterize whether vegetation is prone to uncharacteristically damaging wildfires. Fire Regime Condition Class 1 describes a condition within the sustainable, historic range. Wildfires under Fire Regime Condition Class 1 fuels conditions would be expected to behave in a natural or characteristic manner. Wildfires in Fire Regime Condition Classes 2 and 3 areas would behave in an uncharacteristically damaging manner. The differences between Fire Regime Condition Classes are the degree of departure from the historical average; Fire Regime Condition Class 2 has a greater risk of uncharacteristic wildfire behavior than Fire Regime Condition Class 1, and Fire Regime Condition Class 3 has a greater risk than Class 2. The Trout-West project area contains thousands of acres in Fire Regime Condition Classes 2 and 3. The objective for vegetation management under the National Fire Plan is to reduce areas to Fire Regime Condition Class 1.

The purposes of the project are to:

- reduce the risk of large-scale fires and subsequent erosion in the watershed that could threaten property and human life and exacerbate soil and water quality problems and
- restore the forest to more sustainable conditions

3. PROPOSED ACTION

The Proposed Action consists of vegetation treatments including thinning, creating openings, prescribed burning, and removing trees on up to 28,000 acres within the Trout West Phase 2 EA Project Area (Figure 1). The main elements of the proposed project are listed below.

1. Treat vegetation using adaptive management to ensure protection of resources
    a. Monitor operations and treatment areas during the life of this project to ensure management and resource protection objectives are achieved (see monitoring below).
    b. Upon completion of the project approximately 75 to 80 percent of the treated acres would be thinned, 20 to 25 percent of the treated acres would be created openings, and up to 100 percent of the treated acres would be prescribed burned.

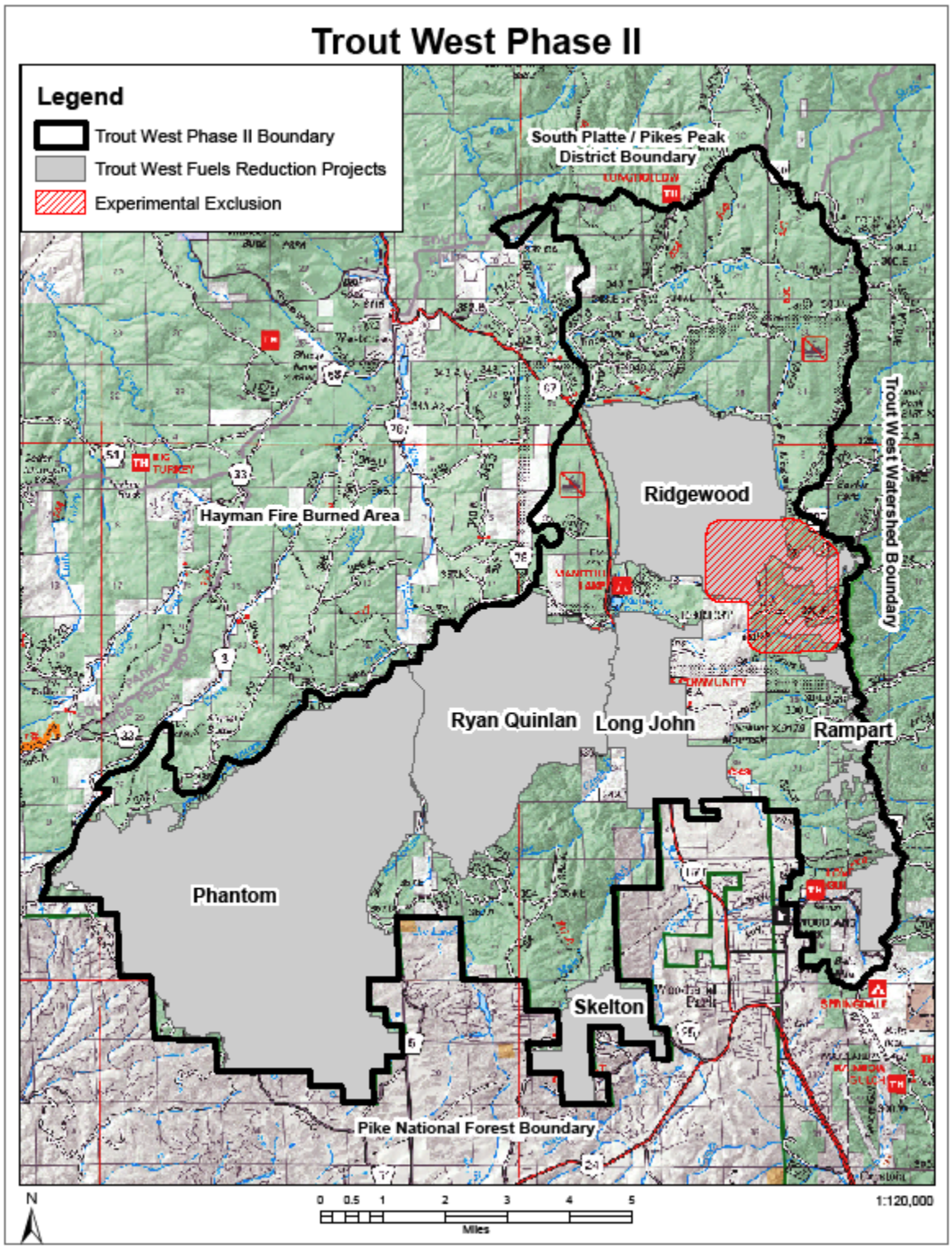

Figure 1. Trout West Phase 2 Project Area.

2. Thin trees to a canopy closure of about 15 to 25 percent. The residual stand basal area would average 30-60 square feet per acre (or approximately 50 to 75 trees per acre). The following guidance and constraints will be used:

    a. The residual stand would be resilient to surface fires and have a low risk of sustaining a crown fire. Preference would be given to retaining ponderosa pine over Douglas-fir and retaining larger trees with few low branches. More Douglas-fir would be retained on north aspects and higher elevations with few Douglas-fir retained on east, south, and west aspects in the lower elevations. Larger more mature trees would typically be retained. The spacing would be variable retaining natural clumpy characteristics. Retain existing snags that are not a hazard, for cavity-dependent wildlife.

    b. Trees are to be thinned in such a fashion as to create clumps or cohorts of trees intermingled with small irregular openings or areas of lower tree density up to ¼ acre in size. For example, a clump of 3-10 trees that is 3-20 feet from the nearest neighboring tree could be left adjacent to an opening or area of low tree density, containing 0-3 trees.

    c. Pockets of older, platy-barked trees would be targeted as leave clumps, and areas of younger trees or pockets of dwarf-mistletoe-infected trees would be targeted for removal to create openings. The above is only an example; actual leave groups and openings would be dictated by stand structure and site characteristics. Overall, canopy cover may differ substantially from one point to another, but across a given stand it should average 15 to 25 percent.

    d. Lop and scatter slash left on-site or crush with yarding and harvesting equipment. Heavy slash would be piled for burning.

    e. Thinning operations would comply with the standards and guidelines listed in the Land and Resource Management Plan, Pike and San Isabel National Forests; Comanche and Cimarron National Grasslands (Forest Plan) as amended.

3. Create 1 to 40-acre openings under the following guidance and constraints:

    a. The lowest densities and majority of openings would occur on south- and west-facing slopes. The north and east slopes would have fewer openings and slightly higher densities.

    b. Approximately 40 percent of the acres in openings would have no trees and the remaining 60 percent would have canopy closures of 1-10 percent.

    c. Lop and scatter slash left on-site or crush with yarding and harvesting equipment.

    d. Openings and operations to create openings would comply with the Water Conservation Practices and BMPs listed in the EA; and the standard and guidelines listed in the Forest Plan as amended.

4. Prescribe burn under the following guidance and constraints:

    a. Prescribe burn logs and slash after material has sufficiently dried, one or more years after completing treatments.

b. Prescribe burn the new openings again five to six years later if necessary to minimize tree regeneration, then every 10 to 30 years as needed to maintain the openings.

c. Prescribed burning would comply with the Water Conservation Practices and BMPs listed in the EA; and the standards and guidelines listed in the Forest Plan as amended.

d. Prescribed fire could be used on up to 100 percent of the project area, including most areas that have been treated mechanically or by hand, to reduce litter and duff layers, slash produced by treatments, surface fuels, regeneration, and ladder fuels. It would also be used to create small openings. The exact treatments to be used and their locations would be determined after treatments are completed, depending on the level of natural and activity fuels in each stand. Before any prescribed burning takes place, detailed burn plans that address site-specific details would be completed and approved.

5. Heavy thinning describes areas where approximately 20 to 50 percent of the existing co-dominant tree overstory would be removed to meet canopy reduction goals. Most heavy thinning areas are likely to produce logs that could be sold to offset the cost of the operation. Logs would be removed under the following guidance and constraints:

   a. Harvesting equipment would not be allowed on slopes greater than 35 percent to remove logs, unless the contractor can demonstrate ability to remove logs without environmental damage.

   b. Use conventional logging systems to remove logs from areas that are accessible from existing National Forest System Roads, unclassified roads, or constructed temporary roads. Typically, use skidders to yard trees off the site.

6. Access the treatment areas under the following guidance and constraints:

   a. Existing National Forest System Roads (NFSRs) would provide the primary access to the project area. No new NFSRs would be constructed. NFSRs used for the project would be maintained or reconstructed as needed to accommodate safety or environmental considerations..

   b. Unclassified roads/trails considered suitable for operations would also be maintained or reconstructed, but would be rehabilitated once operations were completed. These unclassified roads are not part of the Forest Service system and are candidates for restoration based upon roads analysis.

   c. Temporary roads would be constructed to the minimum standard needed for safe and efficient use by project equipment, which may include vegetation clearing and minor earth movement.

   d. Unclassified and temporary roads used to access the treatment areas would be restored by combination of water barring, scarifying, seeding, and blockading access after treatments are completed.

   e. Private roads in the project area could increase access for ground-based logging systems or reduce the need for some roadwork. During implementation, these options could be pursued to reduce the cost or impact of the project.

No-treatment areas are included as part of the design of the Proposed Action. No-treatment areas include areas where fuels reduction or maintenance treatments are not needed, within 100 feet of streams and where treatment would disrupt ongoing research within the Manitou Experimental Forest.

Design Features/Mitigation Measures

Soil and Water Quality Protection

1. All treatments near riparian areas would follow the most current version of Forest Service Handbook (FSH) 2509.25, Watershed Conservation Practices Handbook (WCPH), to minimize effects to riparian habitats.
2. All crossings of the Water Influence Zone (WIZ), as defined in the WCPH, would take place at designated locations. The number of designated crossings and the extent of disturbance in the WIZ from these crossings would be minimized. Crossings would be maintained to prevent erosion and immediately reclaimed after work is completed.

Fish and Wildlife Protection

1. Meet Forest Plan standards for snags by maintaining a minimum of 20-30 snags per 10 acres, well-distributed; retain all soft snags, and in ponderosa pine, Douglas-fir, and aspen stands provide hard snags where biologically feasible: 12 inch diameter or larger with at least five per 10 acres; 10" diameter or larger with at least nine per 10 acres; and 6 inch diameter or larger with at least six per 10 acres. Trees and snags with existing cavities and lightning- struck trees should be favored for cavity nester habitat.
2. Assure that adequate down wood is retained following mechanical treatment and burning to retain an average of 50 linear feet of 12-inch diameter wood per acre.
3. No active goshawk nests are known in the project area. Pre-treatment goshawk surveys would be conducted to identify any active nests within the treatment areas. If an active nest was identified, the Forest Service biologist would be notified immediately. Work would stop until the biologist made a determination of potential impact and mitigation needed. A 30-acre, no-activity buffer would be applied around the nest from March 15 to September 15. This buffer would allow vegetation management operations outside of the March 15 to September 15 period. Structural and vegetation recommendations developed by Reynolds do not apply to this project.
4. Pre-treatment surveys would be conducted for flammulated owls. If an active nest was discovered, the Forest Service biologist would be contacted immediately. Work would stop until a Forest Service biologist made a determination of impacts.
5. Linkhart's long-term flammulated owl study area would not be treated.
6. Protect Abert's squirrel tree clumps (incorporating nesting and feeding trees and interlocking trees) where they are found.
7. Protect two turkey roost tree clumps per section in ponderosa pine sale areas, if available. Minimum size of a clump is 1/10 acre.
8. Avoid disturbing elk calving and mule deer fawning concentration areas between May 15 and June 30.
9. Apply necessary mitigation for any threatened, endangered or sensitive species found in pre-treatment or other surveys. One unit (stand 14 of Ridgewood) may be within 300 feet of the 100-year floodplain of Trout Creek; the boundary would be modified to avoid potential for Preble's meadow jumping mouse habitat.

10. Leave higher densities of trees around rock outcrops (except specific areas that may be opened to enhance scenic quality), resembling natural fire patterns.

11. Consult a fisheries biologist if barriers to fish passage are identified during roadwork. Barriers would be evaluated and redesigned if they are suspected to have unacceptable impacts on fish. Sensitive Plants, Range Resources, and Noxious Weeds Require contractor/purchaser to use designated skid trails and travel routes that would avoid spreading weeds from infested areas.

Sensitive Plants, Range Resources, and Noxious Weeds

1. Require contractor/purchaser to use designated skid trails and travel routes that would avoid spreading weeds from infested areas.

2. Require contractor/purchaser to clean all heavy off road equipment that operates on Forest Service projects before entering treatment areas. Require contractor/purchaser to reseed disturbed roadbeds with a certified noxious weed- free native seed mix. All hay, straw, and mulch used for revegetation or watershed protection measures on National Forest lands would be certified as noxious weed-free. Conduct pre- and post-project field surveys as needed to identify and treat noxious weeds in proposed treatment areas until controlled or eradicated. Conduct field surveys to locate specific special plant species as indicated in the BE/BA.

3. Conduct pre- and post-project field surveys as needed to identify and treat noxious weeds in proposed treatment areas until controlled or eradicated.

4. Conduct field surveys to locate specific special plant species as indicated in the BE/BA.

Air Quality

1. All prescribed burning would be conducted in a manner that complies with State of Colorado's permit process for burns.

Visual Quality Management

1. The following recommendations apply to areas in the immediate foreground (within 300 feet or sight distance, whichever is less) of State Highway 67, County Roads 78, 79, 511, 51, 25, and 5, and developed campgrounds in order to meet Forest Plan Visual Quality Objective of Retention. A landscape architect or recreation specialist would help determine site-specific methods to meet retention guidelines.

    a. Where adjacent to highly used recreational sites, encourage the use of designation by prescription or designation by description prescriptions.

    b. Where individually tree marked, use cut trees instead of leave-trees where reasonable. The objective is to reduce marking paint visibility to the casual observer.

    c. Vary spacing and blend thinned areas with untreated areas.

    d. Leave stumps no higher than eight inches.

    e. Bury or scatter stumps that are pulled up as a part of roadwork. Leave trees in natural patterns around rock outcrops.

f. Retain elements of a park-like setting (larger ponderosa pines, random tree spacing, understory grasses and shrubs) for visual variety.

g. Return skid trails to as near natural condition as possible.

Recreation Management

1. Review travel corridors in the selected alternative to assure that adequate screening is retained to reduce risk of increased off-road/trail use.
2. Add physical barriers along roads to thinned areas if needed to discourage off-road vehicle traffic.
3. Project travel routes open to public use would be signed to warn the public of project traffic or other potential hazards (such as prescribed fire). Where public safety cannot be reasonably ensured, roads may be temporarily closed to public use.
4. Use boulder and earthen barriers, fencing, slash, etc. to deter access if monitoring shows that unwanted use is occurring.

Other Concerns

1. Special use permittees and those with Rights-of-Way would be contacted before implementation to avoid conflicts with the selected alternative.
2. Provide wood products, including firewood, consistent with demand and treatment prescription.
3. would stop and the archeologist would be contacted immediately. The archeologist would evaluate the site and determine future actions. Use previous one...
4. Consider restricting operations on weekends and holidays as needed to reduce user conflicts.
5. A spill plan would be part of contracts used to implement this project. Respond to neighbors' concerns identified as part of implementation planning.
6. Encourage and provide opportunities for citizen involvement in planning, implementation, monitoring, and adaptive management (the public may contact Pikes Peak District Assistant Fire Management/Fuels Officer, Bob Ayotte, at 719-636-1602 for further information).
7. The following design features apply to treatments within the Manitou Experimental Forest:
   a. Ongoing and future research compatible with the project may occur within the experimental forest.
   b. A variety of techniques, methods and prescriptions for fuels reduction may be implemented and evaluated with the experimental forest.
   c. Density guidelines and techniques within the experimental forest may vary more than the general forest as needed for approved research.
   d. All activities proposed within the experimental forest would be coordinated with experimental forest staff.

Monitoring

Two types of monitoring activities are identified: implementation and effectiveness. The intent of monitoring and adaptation is to allow land managers to respond to changed conditions and new information during the project implementation period. Options for how to best implement this project exist and would continue to evolve. The following are the outlines of monitoring for project area resources to ensure resource management objectives are achieved.

1. Monitor Management Indicator Species (MIS) and Forest Sensitive Species that may be directly affected by the project. Species that would be monitored in the project area include: Abert's squirrel, brook trout, elk, olive-sided flycatcher, northern goshawk, and three-toed woodpecker.

   If MIS or Forest Sensitive Species are found during monitoring surveys, then apply the following protection measures as appropriate:

   a. No ponderosa pine with signs of active Abert's squirrel nesting or feeding would be cut.

   b. No elk calving concentration areas would be modified or disturbed from May 15 – June 30.

   c. No treatment activities would occur within a 650-foot buffer surrounding northern goshawk nest sites.

   d. No treatment activities would occur within a 2,500-foot buffer surrounding active northern goshawk nests during post-fledgling periods (March thru September).

   e. Protect other raptor nesting sites using measures similar to those for goshawk.

   f. Apply Forest Plan standards and guidelines for wildlife.

   If the Forest Plan general directions, standards, and guidelines for wildlife and fish resources and habitat improvement and maintenance are not achieved, then:

   a. Reduce or modify vegetation treatment operations and/or

   b. Increase species monitoring to determine the source of impact and apply appropriate mitigation.

2. Monitor vegetation and noxious weeds. If the Forest Plan general directions, standards, and guidelines for habitat improvement and maintenance are not achieved, then

   a. Reduce or modify vegetation treatment operations and/or

   b. Increase use of noxious weed control measures

   c. Increase noxious weed monitoring to determine the source of impact and apply appropriate mitigation.

3. Monitor soil erosion and water quality, including implementation and effectiveness of water conservation practices and other mitigation. If the Forest Plan general directions, standards, and guidelines for soil and water resources are not achieved, then:

   a. Reduce or modify vegetation treatment operations and/or

   b. Increase soil and water quality monitoring to determine the source of impact and apply appropriate mitigation.

4. Monitor off-highway vehicle (OHV) use within the treatment area. If the Forest Plan general directions, standards, and guidelines for dispersed recreation, including OHV use, are not achieved, then:
    a. Scarify, seed, and block unauthorized OHV trails and/or
    b. Gate and/or sign with "closed to motor vehicles" to discourage use of temporary roads or unauthorized OHV trails and increase law enforcement.

4. ALTERNATIVES

The Trout-West Fuels Reduction Project Environmental Impact Statement (US Forest Service 2003) analyzed five action alternatives. The differences in those alternatives were that four of them restricted the restoration activities such as no prescribed fire, no use of temporary roads, etc. In the analyses within that EIS it was found that those alternatives were so restrictive that they caused those alternatives to not meet the purpose and need. The Trout-West Phase 2 EA proposes only a no action alternative to the proposed action. The proposed action addresses the issues that were analyzed in the Trout-West Fuels Reduction Project EIS (US Forest Service 2003).

5. ENVIRONMENTAL ANALYSIS

The Trout-West Fuels Reduction Project EIS (US Forest Service 2003) is adopted as the environmental documentation for the Trout-West Phase 2 EA. The Forest Service Handbook (FSH) provides for the adoption of previous EISs to eliminate duplication and reduce excessive paperwork.

The FSH 1909.15 Environmental Policy and Procedures Handbook, Chapter 40 – Environmental Assessments and Related Documents, provides Section 42 – Other Considerations in Preparing Environmental Assessments. One of the "Other Considerations" as presented in 42.2 - Adoption follows;

Adopt other existing EAs or portions thereof to eliminate duplication and reduce excessive paperwork if the document meets Forest Service standards and requirements. Sections 22.32 and 25.2(c) contain additional direction on adoption.

Sections 22.32 and 25.2 (c) refer to FSH 1909.15 Chapter 20 – Environmental Impact Statements and Related Documents. Section 22.32 – Adoption follows:

(a) An agency may adopt a Federal draft or final environmental impact statement or portion thereof provided that the statement or portion there of meets the standards for an adequate statement under these regulations.

(b) If the actions covered by the original environmental impact statement and the proposed action are substantially the same, the agency adopting another agency's statement is not required to recirculate it except as a final statement. Otherwise the adopting agency shall treat the statement as a draft and recirculate it (except as provided in paragraph (c) of this section.

(c) A cooperating agency may adopt without recirculating the environmental impact statement of a lead agency when, after an independent review of the statement, the cooperating agency concludes that its comments and suggestions have been satisfied.

(d) When an agency adopts a statement which is not final within the agency that prepared it, or when the action it assesses is the subject of a referral under Part 1504, or when the statement's adequacy is the subject of a judicial action which is not final, the agency shall so specify. (40 CFR 1506.3)

Section 25.2 (c) – Elimination of Duplication with State and Local Procedures follows:

(*c) Agencies shall cooperate with State and local agencies to the fullest extent possible to reduce duplication between NEPA and comparable State and local requirements, unless the agencies are specifically barred from doing so by some other law. Except for cases covered by paragraph (a) of this section, such cooperation shall to the fullest extent possible include joint environmental impact statements. In such cases one or more Federal agencies and one or more State or local agencies shall be joint lead agencies. Where State laws or local ordinances have environmental impact statement requirements in addition to but not in conflict with those in NEPA, Federal agencies shall cooperate in fulfilling these requirements as well as those of Federal laws so that one document will comply with all applicable laws.*

The on-going implementation of the Trout-West Fuels Reduction Project EIS (US Forest Service 2003) has provided the US Forest Service with valuable information regarding minimizing impacts and how to implement treatments to maximize their effectiveness at reducing Condition Classes. In addition, just to the north of this area, on the South Platte Ranger District, the US Forest Service, through the Upper South Platte Watershed Protection and Restoration Project has used an adaptive management approach that uses monitoring to evaluate and modify its forest restoration treatments through time. Vegetation monitoring has been ongoing over the life of the project. The latest report on that monitoring (USDA Forest Service 2006) shows that the vegetation treatments are meeting or will meet all the restoration objectives. One of the important findings is that shrub and forb cover doubled in many areas following thinning (USDA Forest Service 2006).

Zamir Libohova conducted hydrological studies in the Upper South Platte Watershed as part of his work for his Master of Science degree requirements at Colorado State University. His thesis titled Effects of Thinning and a Wildfire on Sediment Production Rates, Channel Morphology, and Water Quality in the Upper South Platte River Watershed, was finalized and accepted in spring 2004. He monitored and compared sediment production from roads, and, burned and treated watersheds. In the treated areas he measured no sediment production in 2002. His results show that the vegetation treatments have little effect on runoff and erosion rates (Libohova 2004). He also concluded that the Hayman Fire had a large increase in runoff, erosion, channel morphology and water quality. This study demonstrates that the sediment yield increases that were predicted in the 2003 EIS are likely overestimated and that the water quality of the watershed would best be protected through reduction of wildfire risk.

6. COMMENTS AND SCHEDULE

Comments on this notice are due 30-days from the date that this is published. Therefore comments will be accepted until July 14, 2009. Submit comments to;

Robert Ayotte

Pikes Peak Ranger District

601 South Weber

Colorado Springs, CO 80903

rayotte@fs.fed.us

Phone (719) 636-1602

Fax (719) 477-4233

Following consideration of the comments a DN/FONSI or a Notice of Intent (NOI) to file an Environmental Impact Statement will be issued.

7. REFERENCES

Brown, P.M., M.R. Kaufmann, and W.D. Sheppard. 1999. Long-term, landscape patterns of past fire events in a montane ponderosa pine forest of central Colorado. Landscape Ecology 14: 513-532.

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