

SMITH CREEK VEGETATION TREATMENT PROJECT

Decision Notice/Affirmation of Prior Decision Revised Finding of No Significant Impact & Response to Comments on the Supplemental EA

**Gallatin National Forest
Livingston Ranger District
Meagher County, Montana**

March 2009

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I. Introduction

This Decision Notice documents my decision and the “finding of no significant impact” (FONSI) affirming my December 18, 2007 decision to implement a hazardous fuel reduction/vegetation treatment project on National Forest System lands in the Smith Creek drainage of the Livingston Ranger District. The Project Area has been identified as a wildland/urban interface area by the Park County Community Wildfire Protection Plan (2006).

The analysis area for the project is located in the Crazy Mountains along the northeast corner of the Livingston Ranger District, approximately 35 miles north of Livingston, Montana. It is bordered on the west and south by the Gallatin National Forest boundary, private lands, and by the Lewis & Clark National Forest boundary to the north and east. The approximately 23,000 acre analysis area consists of the wildland urban interface (WUI) boundary as defined by the Park County Community Wildfire Protection Plan (CWFP). The analysis area consists of a mixture of National Forest System (NFS) and interspersed private lands. See Vicinity Map (M-1) and Activity Area Overview Map (M-2).

The project area, located in T5N, R9E, Section 1 & T5N, R10E, Sections 4, 6, & 8, consists of the portions of the Smith Creek WUI that are in the closest proximity to residences, other structures, and primary transportation routes. The communities at risk are located in Sections 5, 6, and 7 of T5N, R.10E. Numerous private residences are located within the project area, many of which are located along the Smith Creek Road #991. The largest concentration of residences (approximately 30) within the forest boundary is the Smith Creek subdivision. These residences are a combination of summer cabins and year round residences, which have been identified as a community at risk from wildfire by the recently completed Shields River Watershed Risk Assessment (USFS 2005a) and Park County Community Wildfire Protection Plan. The reasons for the high fire risk rating include limited access and heavy fuel loadings, both along the travel routes and within/adjacent to the subdivision.

II. Background

The Environmental Assessment (EA) for the Smith Creek Vegetation Treatment Project was released to the public for a 30 day comment period on August 15, 2007. The subsequent Decision Notice and Finding of No Significant Impact (FONSI) were released to interested parties on December 18, 2007.

A lawsuit challenging the project was filed jointly by three [Parties](#) on July 18, 2008 in the United States District Court for the District of Montana, Missoula Division. [The Honorable Judge Donald Molloy](#) reviewed the case and on October 30, 2008 issued a Court Order (CV 08-92-M-DWM) [found for the plaintiffs on one of their claims and remanded the decision](#) to the Forest Service to conduct mapping of key habitat components as required by Forest Plan Standard 6.a.5. (p. II-18, Gallatin Forest Plan, 9/87). The Judge found that “the EA does not comply with mapping requirements for elk, but does comply with hiding cover and security cover requirements.” The order states, “While the Forest Service has complied with the law for the most part, it is deficient regarding mapping of key habitat components for elk. Consequently, in the absence of that mapping, it is impossible to fashion a remedy that could permit the project to

go forward.” The court enjoined the project pending completion of the required remand. There were no NEPA deficiencies found by the Court.

A Supplement to the Smith Creek EA addressing the Forest Plan NFMA deficiency identified by the Court Order was prepared and mailed to interested parties for a 30-day comment period in November 2008. Six comment letters were received. A summary of the comments received and the Forest Service responses are included with this document.

III. Decision

Upon review of the Supplemental EA, public comments and Forest Service responses on the Supplemental EA for the Smith Creek Vegetation Treatment Project, I am re-affirming my original 12/18/2007 decision without modification. I have reviewed the map of key habitat components for elk provided in the Supplemental EA and determined that the range of effects and disclosure of potential impacts from the project as displayed in the original analysis is still valid. There is no need to modify the original decision based on the supplemental information.

In my decision, Alternative 3 (Proposed Action & Meadow Creek Burn), as described in the EA, was selected for implementation. In summary, this alternative will mechanically thin and/or hand-treat vegetation on up to approximately 810 acres, and conduct prescribed burning on an additional 300 acres. This proposal was developed by identifying “at risk” areas containing high fuel hazard ratings relative to improving public and firefighter safety, as well as identifying key portions of Smith Creek and the East Fork of Smith Creek roads that are currently contributing sediment to these creeks. Stands of trees with high potential for stand replacement fire to affect lives and property in this wildland urban interface (WUI) area are included for treatment. Stands where vegetation treatments would maintain and/or improve wildlife habitat (meadows, Douglas-fir stands, aspen), and/or reduce susceptibility to existing and future insect and disease outbreaks are also considered to be high priority.

Mechanized equipment will not be allowed within Streamside Management Zones or wet areas (unless frozen) in conformance with the State of Montana Best Management Practices (BMP’s) as outlined in Appendix B of the EA.

No new permanent or temporary roads will be constructed. Existing project roads and trails (roads that were used for past logging activities and/or trails being used for motorized vehicles) will be utilized. Some of these project roads and trails (#7110 & #7110E) will need to be reopened to provide access to treatment units (See the EA, Table A-24, pp. A-103 thru A-109). Reopened project roads and trails that are located on National Forest System lands will be closed to the public during project related activities and permanently closed and rehabilitated following harvest and post-harvest activities. Rehabilitation will make these roads and/or trails impassable for future motorized travel. Old skid trails (located in proposed Units B, D & G) that have re-vegetated will have coarse woody debris scattered on them to deter ATV usage and provide additional nutrients for soils.

Three road treatment packages for maintaining/improving roads within the project area are included in my decision (See EA, Table A-24, pp. A-103 through A-109 for detailed descriptions). Road Treatment A will be completed during/following implementation of harvest

related activities. Road Treatments B & C will be completed to the extent that funds, (from the sale of timber products) are available. For locations of road treatments see Map M-6 of the EA.

Refer to page 2 of my 12/18/2007 decision notice for additional background information.

IV. Purpose and Need for Action

The purpose and need for this integrated vegetation treatment project is as follows:

- To modify potential wildfire behavior by creating vegetation and fuel conditions that provide for safer firefighter response and public evacuation in the event of a wildland fire.
- To improve wildlife habitat diversity by maintaining meadow and aspen areas, and decreasing tree densities in Douglas-fir stands, thus creating open park-like stands.
- To decrease tree densities in the WUI adjacent to private lands, so that the remaining trees are less susceptible to future insect and disease infestations.

Note: My decision (Alternative 3) includes vegetation treatments only on National Forest System (NFS) lands. Private landowners are responsible for fuels reduction treatments and structure protection measures on privately owned property.

In addition to the primary purpose and need for the project, there are opportunities, as identified in the second project scoping (9/29/2006), to provide benefits to water quality and fish habitat for Yellowstone cutthroat trout by improving drainage and surfacing on project area roads that are adjacent to creeks. Outside funding was obtained for the maintenance of problem areas (sediment sources) on these roads in the summer of 2007 (completed in 2008), prior to any project activity (See Map M-5). These road treatments are necessary to reduce sediment introduction into the adjacent creeks whether or not the vegetation project is implemented, thus would not be considered a connected action (40 CFR 1508.25) to the project. The opportunity to fund this road maintenance was elevated because the area was in the planning stages for a vegetation treatment project. Additional road maintenance treatments to further improve drainage and surface conditions on the Smith Creek Road and the East Fork of Smith Creek Road (Road Treatments B & C, Table A-24, Map M-6) are included as a part of this project. A complete description of the various road treatments is outlined on pp. 1-6 & 1-7.

The following ecosystem restoration activities were also proposed:

- Placement of woody debris on old skid trails previously utilized for harvest activity to deter ATV usage and provide nutrients for soils.
- Aspen exclosures and/or fencing, if needed, to protect aspen regeneration.
- A toilet facility at the ATV parking area.

V. Scope of the Decision

The Council of Environmental Quality (CEQ) regulations implementing NEPA define the “scope” of an action consisting of “...the range of actions, alternatives, and impacts to be considered”. To determine the scope, federal agencies shall consider three types of actions; (1) connected actions; which are two or more actions that are dependent on each other for their utility; (2) cumulative actions; which when viewed with other proposed actions may have cumulatively significant effects and therefore be analyzed together; and (3) similar actions; which when viewed with other reasonably foreseeable or proposed actions have similarities that provide a basis for evaluating their environmental consequences together. (40 CFR 1508.25).

The scope of the vegetative treatment actions included in my decision are limited to stand density reduction and the reduction of fuel loadings on National Forest Land including:

- Thinning and/or harvest of medium and large diameter (>6” dbh) green conifers to meet unit objectives
- Harvest of insect or disease damaged/killed conifers except where needed to meet snag retention requirements.
- Thinning of Post & Pole size green conifers (4” to 6” dbh)
- Slashing of small diameter conifers
- Harvesting and/or slashing of conifers encroaching into meadows and aspen stands.
- Piling and removing and/or burning of downed woody materials and fuels resulting from treatment actions.
- Prescribed burning in the Meadow Creek area (Unit J) is included in Alternative 3.

Other actions that are within the scope of the project that would be completed are cleanup and maintenance of project area roads (Described on pp. 1-6 & 1-7 and in detail in the EA, Table A-24, pp. A-103 through A-109 & Map M-6) and ecosystem restoration activities including weed monitoring and spraying, aspen monitoring and protection measures, placement of woody debris on approximately four miles of previously utilized skid trails, and rehabilitation of user created ATV trails within the Project Area.

Other ecosystem restoration items that may be completed if funding allows, include additional road maintenance (surfacing of portions of Smith Creek and East Fork of Smith Creek roads), aspen fencing, and a toilet at the ATV parking area at the junction of roads #991 and #7710.

VI. Detailed Description of the Decision

Alternative 3-Proposed Action & Meadow Creek Burn (Selected Alternative)

Based on information provided in the EA and Project File, I concluded that Alternative 3 (Selected Alternative) best addressed all elements of the purpose and need for the project. This alternative was developed considering the areas of high fuel hazard, high risk of human-caused ignition, and high social values. Alternative 3 emphasizes treating those stands where thinning and reduction of conifer encroachment will improve public and firefighter safety, will maintain and/or improve wildlife habitat by reducing meadow encroachment, creating open park-like

Douglas-fir stands, enhancing aspen regeneration, and/or would reduce the risk of insect and disease outbreaks. All harvest units associated with Alternative 3 lie on National Forest System lands to be administered as Management Area 8 (timber) with some units having linear inclusions of Management Area 7 (riparian), both of which allow for commercial timber management in the Gallatin Forest Plan. Unit J, which consists of a 300 acre prescribed burn in the Meadow Creek area, would have firefighter and public safety benefits, will improve wildlife habitat through the reduction of ladder fuels in open Douglas fir stands and will reduce conifer encroachment, thus increasing the integrity of grassland/park habitats.

Pre-activity road maintenance treatments (not part of this decision) to improve drainage and reduce sediment concerns on Smith Creek Road (#991), East Fork of Smith Creek Road (#6635), and Goat Mountain Road (#6636) were completed in 2008.

Ecosystem restoration activities that will be completed with implementation of Alternative 3 include Road Treatment A, clean-up and blading of roads utilized for harvest activities (See Table A-24, A-103 through A-109, Map M-6), hand treatments (thinning and slash removal), mechanical treatment of non-merchantable fuels in units, aspen regeneration monitoring, noxious weed monitoring and treatments, and placement of woody debris on old skid roads and entrances to user-created ATV trails where they intersect system trails or roads.

If additional funds are available from the value of timber products once the above-mentioned activities are completed, other ecosystem restoration activities that will be implemented include some or all of Road Treatments B & C (See EA, Table A-24, A-103 through A-109, Map M-6), aspen exclosures and/or fencing (if needed to protect regeneration), and a toilet facility at the ATV parking area.

Map M-5 displays the units of treatment associated with Alternative 3 (Selected Alternative). My decision includes vegetation treatments on a maximum of 810 acres in ten separate units. Stand density reduction utilizing ground-based harvest equipment will occur on a maximum of 435 acres on slopes up to 35%, harvesting both large and small diameter trees. A maximum of 145 acres of thinning/density reduction on slopes >35% will utilize helicopter logging, and approximately 230 acres will consist of hand-treatments (removal of ladder fuels, limbing of large diameter trees, and thinning of small diameter trees). Hand-treatments will occur in sensitive areas (riparian), areas where trees are too small for commercial harvest operations, and in some units after commercial harvest operations have been completed. Leave tree spacing will be highly variable between units and consist of a mixture of patches of multi-storied trees as well as open-spaced individual trees. This irregular stand structure will break the continuity of vertical and horizontal fuels among individual trees. Prescriptions will vary between adjacent units to disrupt the continuity of fuel conditions among stands.

Prescriptions for aspen stands (Units A1 & G) will remove approximately 85% of the conifers while leaving approximately 15% of the healthiest conifers in clumps or individually (where wind-firm and greater than 100 feet from aspen clumps). All aspen will be retained. Small diameter trees and activity fuels will be slashed, piled and burned, or otherwise removed as forest products, with a maximum of 15 tons/acre of downed woody debris left on average in each treatment unit. Additional aspen enhancement opportunities exist in Units B & D where all conifers will be removed within 100 feet of aspen clones.

Prescriptions for the proposed treatment units included in the Selected Alternative can be found in Table 1 below: Table 1 displays individual unit information including approximate acres, objectives for the unit, proposed treatments, and mitigation needed to protect resources. Design criteria and mitigation measures for the units can be found in the EA, pp. 2-30 through 2-39.

Normal operating period for mechanical harvest, skidding, and mechanical slash piling will be from November 1 to April 30 over frozen ground and/or 8 inches of snow in units using ground-based equipment. Units utilizing helicopter harvesting and/or hand-treatment will not be restricted to the winter months (See design criteria and mitigation EA, pp. 2-30 through 2-39). Hand or helicopter treatments will not be conducted in any of the proposed vegetation units during archery season (beginning 9/1 through 10/15) to accommodate the concentrated elk migration in the area. Exceptions to this restriction will only occur after consultation with Montana Fish, Wildlife, and Parks.

Harvest and skidding activities must be completed on a given unit within one season, unless extreme weather conditions prohibit completion. Log hauling for all units will occur over dry or frozen roads to minimize damage to roads and address sediment concerns. Mechanized equipment will not be allowed within Streamside Management Zones or wet areas in conformance with the State of Montana Best Management Practices (BMP's) and the Trout Unlimited Agreement.

Within commercially harvested units, up to 15 tons per acre of coarse, downed woody material on average will be maintained in each treatment unit where available. Activity created slash in excess of 15 tons per acre will be piled and burned. Burning will only occur during the spring (April/June) and fall (late September/November) seasons.

No new road construction will occur (permanent or temporary) with my decision. Existing roads on both private and National Forest lands will be used to access the treatment units. One of the key factors in determining the use of existing roads on private lands is whether permission to use the roads can be obtained. Existing roads on either ownership will require maintenance to support safe and efficient use, consistent with project design criteria and mitigations. Existing project roads and trails (roads and trails that have been utilized for past logging activities) will also be utilized. Some of these project roads and trails will need to be reopened to provide access to treatment units (#7110 & #7110E).

Reopened project roads and trails that are located on National Forest System lands will be closed to the public during project related activities and those that are no longer needed following harvest activities will be permanently closed and rehabilitated, consistent with the recent Gallatin National Forest Travel Plan decision. Rehabilitation will make these roads and/or trails impassable for future motorized travel and will include other necessary resource protection practices. See the EA, Table A-24 for detailed road information. Existing skid roads in Units A1, B, & D will have 5 tons/acre of coarse woody debris scattered along up to four miles of old skid roads after harvest activities are completed to help improve soil quality and to deter ATV use on these trails. Designated motorized routes listed in the 2006 Gallatin National Forest Travel Plan will not be included for woody debris treatment.

Treatment in Unit J will consist of prescribed fire techniques to create a mosaic pattern within the unit. Smaller trees will be targeted, specifically in the grassland/park structures and open Douglas fir stands. In areas that lodgepole pine and sub-alpine fir dominate, passive crown fire will be expected for a short duration to mimic a mixed severity fire effect. Fuel treatment objectives for Unit J are to achieve a balance between leaving a moderate amount of material on the ground to provide nutrients for soil replenishment, but not so excessive as to add to an uncontrollable wildfire. An average of approximately 10 to 15 tons per acre of materials will be left on the ground in each unit, which will likely only support a readily controllable, low-intensity ground fire.

Past fire occurrences within the area have demonstrated that fires tend to burn more actively from the southwest to the northeast (Smith Creek Fire in 1994). The implementation of Unit J will buffer the upper reaches of the East Fork of Smith Creek and potential wildfires that could flank west around Billie Butte (Section 17) and proceed northeast into Sections 5 and 8. The implementation of Unit J will allow for a reduced fuel area that could be utilized as an anchor point for suppression strategies. In conjunction with past harvest activities, Unit J could be utilized to protect the existing road infrastructure and allow for greater amounts of time to evacuate the upper reaches of the East Fork of Smith Creek.

As a part of the burn plan, a comprehensive site specific “Risk” and “Potential Consequences” analysis is developed, which can be used to help determine overall management risk associated with the project. The “Technical Difficulty” ratings are used to facilitate the planning process and help identify prescribed fire positions and skill levels needed to safely and successfully implement the prescribed fire. The development and approval of a burn plan are the final decision criteria to implementing a prescribed fire unit. Prescribed burn plans cannot be implemented without the final signed approval of the District Ranger and can only be amended at the same level. In addition to the burn plan, the District Ranger/Agency Administrator completes a Go/No-Go Pre-Ignition Approval. This approval evaluates whether compliance requirements, prescribed fire plan elements, and internal and external notifications have been completed and expresses the Administrator’s intent to implement the prescribed fire plan. If ignition of the prescribed fire is not initiated prior to expiration date determined by the Agency Administrator, a new approval is required.

Table 1– Alternative 3 (Selected Alternative) Treatment Unit Descriptions

UNIT	ACRES	OBJECTIVE	TREATMENT	REMARKS
A1	52	Promote aspen for wildlife/biodiversity. Reduce fire severity for public and firefighter safety	Remove 85%-90% of conifers, leave healthy conifers in clumps or individuals (if wind-firm) Remove all conifers within 100' of aspen clones. Leave tree species preference: 1) <u>DF</u> , 2) LPP, 3) SAF, 4) ES. Leave up to 15 tons/acre down woody material >3" where available	No cutting within 15' of creek. Protect ATV trail Ground based equipment in winter
A2	15	Promote aspen for wildlife/biodiversity. Reduce fire severity for public and firefighter safety	Within 15'-100' from creek remove 75% of conifers <=8" dbh. Hand pile and burn. Favor leaving conifers that lean towards creek space 15' to 20' between crowns . Leave deciduous trees Limb leave trees 4' from the ground	No cutting within 15' of creek. Retain older/larger clumps where available. Hand Treatment
B	165	Reduce risk of high severity fire for public/firefighter safety. Enhance aspen regeneration and meadow integrity. Lower risk of mtn. pine beetle attack.	Irregular thin, 20'-25' between boles. Favor leaving DF and ES over LPP. Where aspen clones occur, remove all conifers within 100'. Post & pole areas, leave all conifers >6" dbh Pile and burn slash Leave up to 15 tons/down woody material >3" where available	Protect ATV trail Retain older/larger clumps of mostly uncut forest when encountered Ground-based equipment in winter
C	112	Improve evacuation route for public & firefighter safety. Enhance aspen regeneration/meadow integrity.	Thin/weed 20'-25' between trees >8" dbh. Trees <8" thin 10'-12' between crowns. Leave a no tree zone (3-5 acres) near junction of Smith Creek Rd and the east entrance to Sec. 6 subdivision (staging area if a wildfire occurs) Where aspen clumps occur, remove all conifers within 100'.	Hand Treatment

UNIT	ACRES	OBJECTIVE	TREATMENT	REMARKS
D	125	<p>Reduce risk of high severity fire for public/firefighter safety.</p> <p>Enhance aspen regeneration and meadows.</p> <p>Lower risk of mtn. pine beetle.</p>	<p>Irregular thin, 20'-25' between boles. Favor leaving DF & S</p> <p>Where aspen clones occur, remove all conifers within 100'.</p> <p>Pile and burn slash</p> <p>Leave up to 15 tons/down woody material >3" where available.</p>	<p>Protect ATV trail</p> <p>Ground-based equipment in winter</p>
E1	34	<p>Reduce risk of mtn. pine beetle attack.</p> <p>Restore to a park-like DF stand</p>	<p>Irregular thin, 35' between boles of LP, 50' where large DF dominate.</p> <p>Leave trees in clumps where possible.</p> <p>Leave tree preference: 1)DF, 2)ES, 3)SAF, 4)LPP.</p> <p>Remove LPP killed by mtn pine beetle.</p> <p>Retain dead DF and/or LP to meet snag guidelines.</p> <p>Whole tree yard W ¼ of the unit adjacent to private.</p> <p>Leave up to 15 tons/acre woody debris >3" dbh where available</p>	<p>Buffer existing spring.</p> <p>Helicopter log</p>
E2	50	<p>Reduce risk of mtn. pine beetle attack.</p> <p>Reduce high severity fire for public/firefighter safety.</p>	<p>Irregular thin, 35' between boles of LP, 50' where large DF dominate.</p> <p>Leave trees in clumps where possible.</p> <p>Leave tree preference: 1)DF, 2)ES, 3)SAF, 4)LPP.</p> <p>Remove LPP killed by mtn pine beetle.</p> <p>Retain dead DF and/or LP to meet snag guidelines.</p> <p>Feather thinning along private boundary.</p> <p>Leave up to 15 tons/acre woody debris >3" dbh where available</p>	<p>Helicopter log</p>

UNIT	ACRES	OBJECTIVE	TREATMENT	REMARKS
F	60	Reduce risk of mtn pine beetle attack. Reduce spread of wildfire increasing firefighter safety.	Species designate to remove all LP in irregular shaped sub-units within larger unit. Leave all species other than LP. Leave up to 15 tons/acre woody debris >3" dbh where available	Helicopter log
G	28	Reduce risk of high severity fire for public/firefighter safety. Enhance aspen regeneration for wildlife/biodiversity.	Remove majority of conifers, Retain aspen & deciduous trees (leave the wet area outside of boundary). Whole tree yard Leave up to 15 tons/down woody material >3 where available.	No cutting within 15' of creek. Ground-based Equipment in winter
H	103	Improve evacuation route for public & fire fighter safety.	Thin 20'-25' between boles. Leave species preference: 1)DF, 2)ES, 3)LPP, 4) SAF. Leave 10-15 tons/down woody material >3". Remove most of <3" dbh slash material. Thin large trees (>15-20"dbh) approx. 35' apart. Handpile and burn. All slash within 100' of road to be removed, burned, and/or piled.	Hand Treatment
I	66	Reduce risk of high severity fire for public & firefighter safety. Reduce risk of mtn. pine beetle attack.	Irregular thin Large trees (DF, LP,ES) thin approx. 35' between boles. Species preference: 1)DF, 2)ES, 3)LPP, 4)SAF. Machine pile and burn. Leave up to 15 tons/down woody material >3" where available.	Ground-based equipment in winter Harvest contingent on obtaining private access
J	300	Improve wildlife habitat (create open DF stand). Reduce ladder fuels.	Prescribe burn. Create a mosaic pattern of vegetation. Where DF dominates underburn and where LPP/SAF dominates burn passively (mixed severity fire). In openings, burn all conifers.	Leave 100' no burn zone next to Meadow Creek
Total	1110			

Road Maintenance Treatments Associated With Selected Alternative 3

Road Treatment A, clean-up and blading of system roads utilized for project related activities (Discussed in detail in the EA Table A-24, Map M-6), will occur after harvest-related activities have been completed.

All or portions of Road Treatments B and C will also be implemented and will provide benefits to fishery habitat if sufficient funding is available either from receipts generated from the harvested timber and other forest products or through other means. Road Treatments B and C will include improvements to Smith Creek Road #991, Goat Mountain Road # 6636, and East Fork Smith Creek Road #6635 to a three season standard including 6" surfacing on residential access roads and 4" spot surfacing on seasonally gated roads (See EA, Table A-24, pp. A-103 through A-109, Map M-6). These options will improve the drivability of roads in the Smith Creek drainage, especially during the spring and fall seasons when the road surfaces are soft. Current conditions (only minor surfacing) make them subject to extreme rutting (See Map M-6).

Detailed Stand Treatments Common to All Units

Described below are the stand treatments that are common to all units associated with the selected alternative (Alternative 3)

A) Aspen – Remove all conifers within and around aspen clones (individual trees sharing a common root system) for a distance of at least 100 feet. Existing aspen clones will be retained to the extent possible. Fishery mitigation to protect streams (EA, pp. 2-30 & 2-31) will have priority over treating aspen within 15 feet of stream channels. Units A & G have large concentrations of aspen clones and will have the majority of the conifers removed leaving 10-15% of the best formed, healthiest conifers in clumps. Key areas for clump retention will include trailheads, along system roads and ATV trails, wet areas, and viewsheds from adjacent private lands. Fuels resulting from the treatments will be piled and burned at the landings or away from the root systems of the remaining aspen clones. Aspen regeneration monitoring will occur following treatments for several years to determine if measures such as fencing are needed to protect aspen sprouts.

B) Fuels – Merchantable trees will be whole tree yarded and skidded to designated landings for all of the tractor units. The western portion of helicopter Unit E, a shared boundary between the National Forest and private land, (approximately 15 acres) contains existing large downed woody fuels of 15-20 tons acre. Within this area, no additional fuel accumulation will be allowed and all trees cut will be whole tree yarded to a landing for processing. The remaining portions of helicopter units E and F currently contain only light amounts of downed woody fuels. Submerchantable materials and slash from logging operations will be piled or removed from all units leaving up to 15 tons/acre of coarse woody debris, where available, on average in each unit for nutrient recycling, favoring larger diameter pieces. Coarse woody material not needed to meet downed woody debris needs will be skidded to a landing, piled and burned, piled and burned on the harvest site, or otherwise removed from the area. Aspen enhancement units A1 & G will not have piles burned adjacent to aspen clones to protect root systems.

C) Burning – Activity fuels will be treated and burned or otherwise removed following harvest except where needed to accomplish downed woody debris/snag standards. Burning methods would include burning hand or mechanical piles, landings, and/or jackpot burning (treatment of concentrated fuels). These actions will reduce ladder and activity fuels within the treated units.

D) Tree Densities –Existing stand densities are highly variable within the units. The number of existing trees per acre varies greatly for each stand and ranges from 100 to 3000 stems per acre. On the average, approximately 300-500 irregularly spaced trees (of various sizes) per acre will be left. Portions of some of the units may be left untreated to meet a variety of resource objectives. The remaining trees will vary in size from seedlings to mature trees (six inches tall to 80 feet tall). Treatments are designed to reduce ladder fuels (small to mid-story trees and shrubs), thin the overstory to increase the space between crowns, reduce accumulations of down woody materials to levels consistent Forest Plan standards, and create healthier stand conditions.

Untreated or minimally treated portions of some stands will be left in a natural appearing condition and the trees in these groups will contribute to the total number of trees left per acre. Given these clumps, more than 500 established trees/acre will be left in portions of some units. However, 500 trees/acre is the high-end for fuels objectives for the majority of the units.

E) Snags – Forest Plan standards for snag management will be met throughout the various harvest units with the selected alternative. Commercial harvest Units E and F do not have evidence of past harvest, so retaining adequate numbers of snags will not be problematic. For Units A1, B, D, and G (units having past commercial harvest), snag surveys using fixed area plots of 37'3" radius (1/10th acre plot) were conducted. The standard specifies 30 snags per 10 acres, which equates to 3 snags per acre on average. Following are the average # snags/ acre that were found and will be retained in each of these units:

- Unit A1 - 4 snags/ acre
- Unit B - 5 snags/ acre
- Unit D - 4 snags/ acre
- Unit G - 6 snags/ acre

The remaining units will be hand-thinned, removing mostly small diameter ladder fuels and lower live limbs, so snag numbers will not be affected. A snag provision will be included in the timber contract to ensure that existing snags not currently containing mountain pine or Douglas-fir beetles will be left (pending safety concerns). The harvested units (A1, B, D, and G) will be closed to firewood cutting in order to ensure that snags remain in the treated stands after harvest activities are completed. This closure will remain in effect until monitoring indicates that replacement snags are available.

Mitigation and Monitoring

Various mitigation measures have been incorporated into my decision to reduce the probability of adverse impacts to resources from implementing Alternative 3. These mitigation measures are described in detail on (pp. 2-30 through 2-39) of the EA.

My decision also incorporates various monitoring methods (EA, pp. 2-40 through 2-42). Monitoring will be conducted and documented by various specialists and/or their staff. Monitoring results will be used to determine whether objectives are being met. Sampling frequency of the required monitoring will vary somewhat from year to year and is subject to change depending on available monitoring resources and monitoring results.

VII. Decision Criteria and Rationale for the Decision

Based on a comparison of the alternatives with the three criteria described below, my decision was to implement Alternative 3 (Proposed Action & Meadow Creek burn). The criteria were:

1. Achievement of the project purpose and need as outlined on page 4 of this document.
2. Responsiveness to public comments (Decision Notice, Appendix A) and the environmental issues (EA, pp. 2-4 through 2-9) identified in association with this project.
3. Consistency with laws, regulations, and policy as described in detail on (pp. 24-33) of this Decision Notice.

The EA for this project addresses in detail the potential effects of implementing or not implementing a hazardous fuel reduction/vegetation treatment project in the Smith Creek WUI on a variety of National Forest resources for each of the alternatives considered. I conclude from this information that the predicted effects of implementing Alternative 3 are well within acceptable limits. After careful evaluation of the following decision criteria, I strongly believe that Alternative 3 best meets the purpose and need for the project, as well as the overall public interest.

1) Achievement of the Purpose and Need

Alternative 1 (No Action Alternative) would not treat the vertical and horizontal continuity of fuel arrangement in the Smith Creek WUI. No actions would be undertaken over the next few years that respond to the purpose and need for the project as identified on p. 4. The opportunity to reduce fuel accumulations would be deferred. These stands would likely increase in susceptibility to lethal wildfire and/or insect and disease outbreaks. Meadows and aspen stands would continue to shrink due to conifer encroachment. Douglas-fir stands would contain high densities of trees thus reducing open park-like habitat on the landscape. Additional road maintenance in the Smith Creek area would be a low priority that would only likely be achieved if and when additional money became available from outside sources. Alternative 1 does not respond to Forest Plan management area direction for Management Area 8 to provide for productive timber stands, optimize growing potential, optimizing sustained timber production and vegetative diversity.

Alternative 2 (Proposed Action Alternative) would address and meet much of the purpose and need for the project. This alternative was developed considering the areas of high fuel hazard, high risk of human-caused ignition, and high social values. The proposed action emphasized treating those stands where thinning and reduction of conifer encroachment would improve public and firefighter safety, maintain and/or improve wildlife habitat, enhance aspen regeneration, and those having existing insect and disease outbreaks. All harvest units associated with the proposed action would be administered as Management Area 8 (timber) with some units having linear inclusions of Management Area 7 (riparian), both of which allow for commercial timber management in the Gallatin Forest Plan.

Alternative 3 (Selected Alternative) includes all units and activities associated with Alternative 2 and adds Unit J, which consists of a 300 acre prescribed burn in the Meadow Creek area (See Map 4). Implementation of Unit J will improve wildlife habitat by reducing ladder fuels in open Douglas-fir stands and reduce conifer encroachment, thus increasing the integrity of grassland/park habitats. Unit J will help improve firefighter and public safety in the East Fork of Smith Creek in the event of a wildfire. The Selected Alternative will address and meet all aspects of the purpose and need for the project.

2) Responsiveness to Environmental Issues and Public Comments

In coming to my decision, I considered internally generated issues (Project File, Vol. 2, Chap. 5), public issues (Project File, Vol. 2, Chap. 6), the comments submitted during the scoping phase of this analysis (Project File, Vol. 2, Chap. 3), and those comments submitted during the EA comment period (Appendix A and Project File, Vol. 2, Chap. 4). The Interdisciplinary Team thoroughly studied the various issues and developed a range of alternatives and mitigation measures that addressed the most critical issues (EA, Chapter 2). I reviewed the significant environmental issues listed below and evaluated the implications of each alternative.

Water Quality: The water quality analysis is documented in the EA (pp. 3-19 through 3-30) and in the Water Quality and Fishery specialist reports (Project File, Vol. 4, Chapter 11). I thoroughly considered this information and came to the following conclusions:

With the selection of Alternative 1 (No Action Alternative), additional road maintenance and improvements would not likely occur in the Smith Creek area in the foreseeable future. There would be no increase in road sediment due to Forest Service activities, but there would be no decrease due to the lack of further road improvements (drainage, surfacing). Continuous vertical and horizontal fuel concentrations would remain throughout the WUI and the likelihood of a catastrophic wildfire adversely affecting the riparian areas would continue to increase. Catastrophic wildfire has potential to increase soil erosion, debris flows, and sediment loadings to Smith and Shields Rivers.

With Alternative 2, project activities and Road Treatment A would cause a very slight increase in sediment short term, but long-term sediment reductions would be expected. If any or all of Road Treatments B & C were implemented, significant decreases in sediment would occur long-term. Continuous vertical and horizontal fuels would be broken up and decreased in the WUI. The likelihood of a catastrophic wildfire adversely affecting the riparian areas would be decreased, also reducing the potential for additional sediment loadings to Smith and Shields Rivers.

With Alternative 3 (Selected Alternative), project activities and Road Treatment A will cause a slight increase in sediment short term, but in the long term, sediment reductions. Meadow Creek burn will create minor sediment increases short-term. If any or all of Road Treatments B & C are implemented, significant decreases in sediment will occur long-term. Continuous vertical and horizontal fuels will be broken up and decreased in the WUI. The likelihood of a catastrophic wildfire burning intensely through the riparian areas will be decreased thus reducing the potential for additional sediment loadings to both the Smith and Shields Rivers.

Fisheries: The conclusions I made after careful consideration of the effects analyses presented in the EA (pp. 3-31 through 3-52) and in the fisheries specialist report (Project File, Vol. 4, Chap. 11-7) are documented below:

With Alternative 1 (No Action Alternative), no fuel reduction activities would occur along riparian corridors. There would be no fuel reduction related impacts to riparian areas, or fish habitat. Additional road maintenance and repairs to Smith Creek roads would be uncertain due to the low priority of the area for funding.

Pre-activity road maintenance treatments (funded with special road maintenance dollars) associated with the projects (Alternatives 2 & 3) will improve drainage and reduce sediment concerns on Smith Creek Road #991, East Fork of Smith Creek Road #6635, and Goat Mountain Road #6636. These treatments were completed in summer 2008 prior to harvest activities. The treatments include improving stream crossings, adding armored drainage dips, reshaping portions of the road prisms and ditches to improve drainage, and spot surfacing of problem areas. The treatments were designed to reduce runoff and the introduction of sediment into the streams.

Implementation of Alternative 2 would result in additional sediment reductions and improved spawning habitat with the implementation of Road Treatments B and/or C if sufficient funding is generated from the project or other sources. Mitigation (EA, pp. 2-30 & 2-31) ensures no adverse effects on riparian integrity or streambank stability would occur as a result of project implementation.

Alternative 3 (Selected Alternative) will also result in additional sediment reductions and improved spawning habitat due to Road Treatments B and/or C if sufficient funding is generated from the project. Mitigation (EA, pp. 2-30 & 2-31) ensures no adverse effects on riparian integrity or streambank stability will occur as a result of project implementation.

Fuels: The conclusions I made after careful consideration of the effects analyses presented in the EA (pp. 3-52 through 3-63) and in the fuels specialist report (Project File, Vol. 2, Chap. 8-1) are documented below:

With Alternative 1, forested areas within the Smith Creek WUI would continue to follow natural rates of succession, with fuels becoming denser in areas adjacent to private lands. Wind-driven wildfire would be expected to transition quickly from the ground into the forest canopy. Risks to public and firefighter safety from wildfire would be high and would continue to increase over time without treatment of fuels.

Implementation of Alternative 2 (Proposed Action Alternative) would modify the volume and arrangement of fuels within the Smith Creek WUI. Ladder fuels and surface fuel loadings would be reduced adjacent to private lands thus reducing the likelihood of crown wildfire and providing adequate time for public evacuation. Implementation would greatly increase firefighting capabilities and safety in the WUI.

Implementation of Alternative 3 (Selected Alternative) will modify the continuous arrangement of vertical and horizontal fuels within the Smith Creek WUI. Ladder fuels and surface fuel loadings will be reduced by thinning areas adjacent to private lands, thus lowering the chances for a catastrophic crown fire in the area. Crown fire risks to adjacent private land in Section 17 will also be reduced with implementation of the Meadow Creek prescribed burn. Reducing fuels in this unit will open the area and help provide additional time for evacuation along the East Fork of Smith Road in the event of a wildfire. Alternative 3 will increase firefighting capability and safety in the WUI.

Wildlife Habitat: The wildlife habitat analysis is documented in the EA (pp. 3-63 through 3-78) and in the wildlife specialist reports (Project File, Vol. 3, Chap. 9-1). I thoroughly considered this information and came to the following conclusions:

Selection of Alternative 1 (No Action Alternative) would not improve wildlife habitat by modifying current forest structure. Meadow habitat, open Douglas-fir stands, and aspen areas would continue to decline or be lost entirely over time. The project area would continue to have a large percentage of area represented by medium age class alpine fir.

Implementation of Alternative 2 (Proposed Action Alternative) would improve habitat for species dependent on non-forested habitat groups (grassland, wet meadow, aspen, willows). The proposed thinning would result in increased foraging opportunities for big game and raptors. Late seral, single story old growth Douglas-fir stands would be increased. The medium age class alpine fir structure would be reduced in the project area. A mosaic of non-forested and forested stand structural stages would be created.

Implementation of Alternative 3 (Selected Alternative) will improve habitat for species dependent on non-forested habitat groups (grassland, wet meadow, aspen, willows). The thinning will result in increased foraging opportunities for big game and raptors, as well as nesting habitat for snag dependent birds. Late seral, single story old growth DF stands will be increased. The medium age class alpine fir structure will be reduced in the project area. A mosaic of non-forested and forested stand structural stages will be created. Implementation of Meadow Creek burn will restore additional open Douglas-fir forest.

Insect and Disease: The insect and disease analysis is documented in the EA (pp. 3-79 through 3-84) and in the vegetation specialist reports (Project File, Vol. 4, Chap. 12-1). I thoroughly considered this information and came to the following conclusions:

Selection of Alternative 1 (No Action Alternative) would increase the probability of a mountain pine beetle epidemic in the Smith Creek WUI adjacent to private lands. This in turn would also increase the likelihood of numerous additional conifers to be killed, thus increasing fuels build-up. Douglas-fir beetle infestations would likely remain at current endemic levels unless an extended drought, large wildfire, or wind event occurs.

Implementation of Alternative 2 (Proposed Action Alternative) would reduce the likelihood of epidemic levels of mountain pine beetle mortality building up in the portions of the Smith Creek WUI that are immediately adjacent to private land. Thinning will remove the currently infested trees and increase the health and vigor of the remaining trees thus making them more resistant to future Mountain pine beetle attacks. Future Douglas-fir beetle infestations would likely decrease slightly in the timber compartment and Project Area due to increased vigor and open spacing of Douglas-fir. There is evidence of past Douglas-fir beetle activity but current infestations are at very low levels

Implementation of Alternative 3 (Selected Alternative) will also reduce the likelihood of epidemic levels of mountain pine beetle mortality in the Smith Creek WUI immediately adjacent to private land, similar to the implementation of Alternative 2. Thinning will increase the health and vigor of the remaining trees. The implementation timing and parameters for the Meadow Creek burn are critical to prevent future Douglas-fir beetle epidemics by preventing the scorching of numerous large Douglas-fir. Scorched trees can become stressed and are more prone to attract Douglas-fir beetles. A site specific burn plan writing process will utilize weather and fire behavior models to determine the most optimal time period (also referred to as a window) the meet the burn objectives with the lowest possible risk of escape. The models area also used to determine rates of spread, crown scorch, and tree mortality.

Soils: The soils analysis is documented in the EA (pp. 3-85 through 3-92) and in the soils specialist report (Project File, Vol. 4, Chap. 10-1). I thoroughly considered this information and came to the following conclusions:

Selection of Alternative 1 (No Action Alternative) would have no effect on soil productivity because no ground-disturbing treatments were proposed with this alternative.

Implementation of Alternative 2 (Proposed Action Alternative) would have no long-term detrimental effect on soil productivity due to effective mitigation and restoration practices. All ground-disturbing treatments adhere to Regional Soil Quality standards, including those with previous harvest.

Implementation of Alternative 3 (Selected Alternative) will have no long-term detrimental effect on soil productivity due to effective mitigation and restoration practices. All ground-disturbing treatments adhere to Regional Soil Quality standards, including those with previous harvest. Prescribed burning associated with the Meadow Creek burn unit will be low intensity and will not affect soil productivity.

Other Issues: The NEPA provides for identification and elimination from detailed study, those issues that are not significant or which have been covered by prior environmental review, narrowing the discussion of these issues to a brief presentation of why they will not have a significant effect on the human environment or providing a reference to their coverage elsewhere (40CFR 1501.7(3)). While I considered these issues in making my decision, they were either unaffected, mildly affected, or the effects could be adequately mitigated for all of the alternatives. An assessment of each of these issues is provided in the EA (Chapter 2-10 through 2-16 and in Appendix A).

- A. Noxious Weeds**
- B. Livestock Grazing**
- C. Recreation (Includes Trails, Roadless, and Unroaded Areas)**
- D. Visuals**
- E. Wildlife Issues (TES, Sensitive, MIS Species)**
- F. Sensitive Plants**
- G. Old Growth/Vegetative Diversity**
- H. Heritage Resources**
- I. Smoke Emission**
- J. Economic Analysis**
- K. Roads**

3) Consistency with laws, regulations, and policy

Laws, regulations, and policies that pertain to this project include the Gallatin Forest Plan, the Gallatin National Forest Land and Resource Management Plan FEIS (1987); the Gallatin National Forest Travel Plan Decision, Region 1 Soil Standards, 1995 Federal Wildland Fire Management Policy and Program, National Fire Plan 2000, the Endangered Species Act of 1973, Executive Order 11990 (wetlands and floodplain degradation), Executive Order 12898 (Environmental Justice), Federal Noxious Weed Management Act, Forest Service Manual 5150 Fuels Management, Forest Service Manual 2526 Riparian Management, Migratory Bird Act of 1918 (as amended), Multiple Use Sustained Yield Act of 1960, National Environmental Policy Act of 1969 (NEPA) as amended; National Forest Management Act of 1976 (NFMA), National Historic Preservation Act of 1966; State of Montana Water Act of 1974, Clean Water Act of 1977, Clean Air Act of 1963, State of Montana Best Management Practices; Trout Unlimited Settlement Agreement; Land Use Strategy for Westslope and Yellowstone Cutthroat Trout; Cooperative Conservation Agreement for Yellowstone Cutthroat Trout; and Executive Order 12962 (June 1995) Aquatic Resource Protection. More detailed descriptions can be found in Chapter 3 of the EA. A comparison of compliance between the three alternatives is summarized below:

Alternative 1 (No Action Alternative) would be consistent with the above-mentioned laws, regulations, and guidelines, however, the majority of the treatment areas lie in Management Area 8 as described in the Gallatin Forest Plan (Chapter III). Management Area 8 goals are to provide for productive timber stands, optimize growing potential, and develop equal distribution of age classes to optimize sustained timber production and improve vegetative diversity. No vegetative treatments would occur in the Smith Creek WUI with selection of Alternative 1 and opportunities to improve vegetative diversity and forest health would be foregone in the immediate future. The 1995 Federal Wildland Management Policy and program's number 1 priority is firefighter and public safety. With Alternative 1, there would be no modification of vertical and horizontal fuel loadings in the Smith Creek WUI, adjacent to private residences and structures.

Alternative 2 (Proposed Action Alternative) would be consistent with all of the above-mentioned laws, regulations, and guidelines. Opportunities associated with goals for Management Area 8 to optimize growing potential, improve forest health, and improve vegetative diversity would be achieved through the various vegetative treatments associated with both of the action alternatives. Implementation would help create a mosaic of non-forested and forested structural

stages and would improve wildlife habitat for those species dependent on non-forested habitat types such as grasslands, willows, aspen, and wet meadows. The 1995 Federal Wildland Management Policy and program's first priority is firefighter and public safety. Treatments associated with Alternative 2 would modify vertical and horizontal fuel loadings in the Smith Creek WUI adjacent to private residences and structures and provide for additional time for evacuation, were a catastrophic wildfire to occur. Compliance with all other laws, regulations, and guidelines would be ensured by applying effective mitigation as outlined on pp. 2-30 through 2-39 of the EA.

Alternative 3 (Selected Alternative) will comply with all laws, regulations, and policies listed above for the same reasons. Effects of vegetative treatments will be the same as those with implementation of Alternative 2 regarding consistency with laws regulations, and standards.

VIII. Consistency With Other Laws, Regulations, and Policies

Gallatin Forest Plan

Management Area Direction

The Forest Plan subdivided the forest into 26 management areas (MA's). These areas are described in detail in Chapter 3 of the Forest Plan (FP, pp. III-2 through III-73). Vegetative treatments associated with my decision will occur within three Management Areas (MAs) 7, 8, and 10. The majority of the harvest activity acres associated with my decision fall primarily in Forest Plan Management Area MA8 (timber management). The sections on Management Area Map M-10 that are displayed as MA 99 were previously privately owned and traded to the Forest Service in 1997 with the Goat Creek Land Exchange. These sections have not officially been assigned management areas after the land trade. The interim management direction for these areas is to manage them the same as adjacent areas. Section 1 is the only section containing treatment units that is currently unclassified. The units in Section 1 are adjacent to MA8 on the north, east and south boundaries, so the interim direction would be to treat them as such.

Some of the harvest units include small acreages of narrow linear inclusions of MA7 (riparian). MA7 is suitable for timber harvest as long as the needs for riparian dependent species are met. Standards relative to wildlife and fisheries within these MAs include providing for wildlife and fishery habitat improvement consistent with MA goals and to incorporate considerations for wildlife and fisheries in the project planning process. Improvement of specific wildlife and fishery habitats was integrated into the purpose and need for this project. Detailed analysis was completed to identify and mitigate for any adverse affects. The action alternatives meet these wildlife and fishery standards applicable to MA 8, as well as MA7 (riparian). Standards for Management Areas 7 & 8 applicable to the six significant issues will be met with the implementation of the mitigation measures outlined in the EA pp. 2-30 through 2-39.

The Meadow Creek prescribed burn falls within MA10 (open grasslands interspersed with suitable timberlands). Additional direction can be found in the Forest Plan on (pp. III- 19-25, and 30-31). Specific resource management direction is given in Chapter 1 (pp. 1-12 through 1-13) of the EA. The Meadow Creek burn is consistent with MA10 management direction.

There is nothing in my decision (Alternative 3) that is incompatible with the direction for any of the Management Areas that are found in the Project Area.

General Direction

Forest Plan Standard for Wildlife and Fish, page II-18, section 6.a.2 – Use the Montana Cooperative Elk-Logging Study when evaluating timber sales and road developments in elk habitat. *The Gallatin National Forest Travel Management Plan amended the Gallatin National Forest Land and Resource Management Plan (Forest Plan) to remove this direction in October 2006.*

Forest Plan Standard for Wildlife and Fish, page II-18, section 6.a.4 – Use the Montana Cooperative Elk-Logging Study for analyzing elk habitat security and conduct [HEI] analysis. *The Gallatin National Forest Travel Management Plan amended the Gallatin National Forest Land and Resource Management Plan (Forest Plan) to remove this direction in October 2006.*

Forest Plan Standard for Wildlife and Fish, page II-18, section 6.a.3 – Big game winter range will be managed for forage and cover. Winter range is not located within the project area; elk migrate out of National Forest and utilize lower elevation private lands.

Forest Plan Standard for Wildlife and Fish, page II-18, section 6.a.5 – Maintain hiding cover associated with key habitat components. Hiding cover was estimated at approximately 70-90% of the area and is not limiting. There were no areas of concern identified for big game species for this project. The vegetative structural diversity analysis indicates a 1% decrease in the pole, mature, and old growth structural classes, maintaining acceptable levels of hiding cover. Identified mitigation measures will facilitate fall migration to winter range.

Forest Plan Standard for Wildlife and Fish, page II-18, section 6.a.7 – Standards for snag and down woody material will be followed. Snag habitat needs were considered for Townsend's big-eared bat, flammulated owl, Northern goshawk, pine marten, and migratory birds. Forest Plan standards for snag and down woody debris management will be met under the Selected Alternative. Snag habitat will remain well distributed across the landscape within all forest types. In addition to the mitigation described in the EA (pp.34 & 35), additional measures as described earlier in this document will be implemented.

Forest Plan Standard for Wildlife and Fish, page II-18, section 6.a.8 – Emphasis will be given to the management of special and unique wildlife habitats such as wallows, licks, talus, cliffs, caves, and riparian areas. Key components such as cover, security areas, and road densities will remain unchanged. The selected alternative will not result in adverse modification of big game or its associated habitat. Elk population goals have been met for this EMU and are considered to be healthy and widely distributed.

Forest Plan Standard for Wildlife and Fish, page II-18, section 6.a.11 – Roads and forest cover will be managed to provide habitat security and diverse hunting opportunity. A Hillis (Hillis and others 1991) model vulnerability analysis was also conducted for HD315. This indicated that 36% of the hunting district met the Hillis model for elk security cover (30% is recommended). Forest cover is not limiting in this project area and there are no new roads or changes in access.

Identified mitigation measures will provide quality bow hunting opportunities to better meet population harvest objectives.

Forest Plan Standard for Wildlife and Fish, page II-18, section 6.a.12 – Habitat that is essential for species identified in the Sensitive species list developed for the Northern Region will be managed to maintain these species. Sensitive species were addressed as part of the analysis for proposed vegetation treatment in the Smith Creek project area. All terrestrial sensitive species were dismissed or analyzed in detail. Mitigation measures were identified as appropriate.

Forest Plan Standard for Wildlife and Fish, page II-18, section 6.a.13 – Indicator species will be monitored. Indicator species were identified and addressed as part of the analysis for proposed vegetation treatment in the Smith Creek project area. Mitigation measures were identified as appropriate.

Forest Plan Standard for Threatened and Endangered Species, page II-18, section 6.b.all. Threatened and endangered species were addressed as part of the analysis for proposed vegetation and stewardship treatments.

Forest Plan Standards for grazing (p. II-20). The main guideline applicable to this project is: “Structural and nonstructural improvements to increase forage production will be planned and scheduled through the allotment management process”. Forest Plan Standard for Vegetative Diversity, page II-18, section 6.c.1 – Forest lands and other vegetative communities such as grassland, aspen, willow, sagebrush, and whitebark pine will be managed by prescribed fire and other methods to produce and maintain the desired vegetative conditions. My decision includes vegetative treatments and prescribed fire treatments that will enhance vegetative diversity for these vegetative communities.

Forest Plan Standard for Recreation, page. II-1 - Provide for a broad spectrum of recreation opportunities in a variety of Forest settings. The Forest Plan recognizes objectives for recreation settings by incorporating the Recreation Opportunity Spectrum (ROS), which provides a framework for stratifying and defining classes of outdoor recreation environments, activities, and experience opportunities (FP, pg. II-2). Furthermore, the Plan specifically identifies as objectives activities that will be managed 1) to provide for users’ safety, 2) that existing recreational hunting opportunities will be maintained, 3) that recreation trails will provide safe public access, and 4) to continue the cabin rental program (FP, pg. II-2-3). Alternative 3 will comply with this direction provided by the Gallatin Forest Plan.

Forest Plan Direction for Visual Resource, page II-1 - Provide visitors with visually appealing scenery. Forest Plan Visual Quality Objectives (VQOs) are a blending of the results from the VMS Inventory and other resource considerations. The VQOs serve as the Forest Plan standards for visual quality that provide large-scale guidance for the degree of acceptable landscape change for all management initiated landscape-altering activities (FP, pg. II-16). The five VQOs that are assigned to specific land polygons in the Forest Plan are Preservation, Retention, Partial Retention, Modification, and Maximum Modification. Within the Smith Creek project area, the Forest Plan VQOs of Retention and Modification apply. The definitions of these VQOs are shown on page VI-44 of the Gallatin National Forest Plan. By implementation of the mitigation and design criteria outlined in the EA on pp. 2-36 & 2-37, my decision will meet Forest Plan standards for visual quality.

Forest Plan Direction for Air Quality in Forest Wide Standards, page II-23-.Require the Forest to cooperate with the Montana Air Quality Bureau (now DEQ) in the SIP and smoke management plan. By limiting the timing, quantity, and intensity of the burning activities as described in the EA Chapter 2 (mitigation), my decision will comply with the air quality laws, guidelines and standards.

The Gallatin National Forest Land and Resource Management Plan (1987)

My decision tiers to the Final Environmental Impact Statement (FEIS) and Land and Resource Management Plan (Forest Plan) for the Gallatin National Forest (USDA Forest Service 1987 PF 206 & 206(a)). The Forest Plan provides direction for all resource management programs, practices, uses, and protection measures for the Gallatin National Forest.

Gallatin Forest Travel Plan Direction

There are no applicable travel plan standards for wildlife, water quality, and/or fisheries. There are no new roads, reconditioned roads, or changes in the road and/or trail system included in this project. Open road densities will remain the same. From a wildlife, water quality, and fisheries perspective, the project will be consistent with our Travel Plan direction.

Regional Issues

Region 1 Soil Guidelines

Region 1 soil guidelines should be met for all units associated with my decision if the soil protection BMPs are used and the specified restoration practices are carried out. Therefore, there will be no cumulative effects to soil quality or productivity. Alternative 3 is consistent with the Soil Quality Standards as applied to cumulative effects and to the Forest Plan in terms of protecting soil productivity.

National Fire Plan Direction

The 1995 Federal Wildland Fire Management Policy and Program contains nine guiding principles that support my decision regarding the Smith Creek Vegetation Treatment Project.

1.) ***Firefighter and public safety is the first priority in every fire management activity.*** One purpose and need of the Smith Creek Vegetation Treatment Project is to improve firefighter and public safety, modifying fire behavior by changing the fuels environment in the portions of the WUI that are the closest to residences and other structures. The modification of fuels will provide safer conditions in the event of a large wildfire event.

2.) ***The role of wildland fire as an essential ecological process and natural agent have been incorporated into the planning process.*** Treating the Smith Creek WUI will reduce the current level of risk, allowing the possibility of future wildland fires to play an ecological role under certain conditions.

3.) ***Fire management plans, programs, and activities support land and resource management plans and their importance.*** The Smith Creek project is consistent with the Federal Wildland Fire Management Policy and the Gallatin National Forest Fire Management Plan.

4.) ***Sound risk management is the foundation for all fire management activities.*** The Smith Creek Vegetation Treatment Project, specifically Unit G, analyzes the risk to the public and firefighter communities associated with the Selected Alternative by comparing the resulting fuel conditions associated with management activities versus “no action”, as related to fire behavior.

5.) ***Fire management programs and activities are economically viable, based upon values to be protected, costs, and land and resource management objectives.*** With the Smith Creek Vegetation Treatment Project, the overriding value at risk is the safety of the public and firefighters. A cash-flow analysis included in Appendix A to this document supports the conclusion the anticipated return from the sale of wood products will exceed the total cost of the activities needed to realize the mandatory post-treatment activities and that funds will likely be available to achieve some of the optional ecosystem restoration items such as additional road maintenance, possible aspen fencing, further road reclamations, and a toilet at the ATV parking area.

6.) ***Fire management plans must be based on the best available science.*** The Smith Creek Vegetation Treatment Project has incorporated the latest science and modeling techniques for fire behavior prediction and the effectiveness of fuels treatments. These techniques include Forest Vegetation Simulation –Fire/Fuel Effects Extension (FVS-FFE), NEXUS, and BEHAVE (See p. 2-7 Issue Indicator for a description of these modeling techniques).

7.) ***Fire management plans and activities incorporate public health and environmental quality considerations.*** The Smith Creek Vegetation Treatment Project addresses the need for increasing public and firefighter safety in the event of a large fire event. Smoke management, recreational values, and the impacts of fuels treatments on wildlife, fish, noxious weeds, soils, and visuals are also addressed in the document.

8.) ***Federal, Tribal, State and local interagency coordination and cooperation are essential.*** Coordination and cooperation for the project included local consultation with the Park and Meagher County officials including county commissioners, fire, and law enforcement; and the Northern Rocky Mountain Resource Conservation and Development Council (RC&D). Federal cooperation and consultation includes State and Federal Private Forestry groups and the Crow tribal government.

National Fire Plan 2000

The National Fire Plan 2000 states “Assign the highest priority for hazardous fuels reduction to communities at risk, readily accessible municipal watersheds, threatened and endangered species habitat, and/or other important local features, where current conditions favor uncharacteristically intense fires”. The analysis area for the project has been identified by the Park County CWPP as a WUI that is at high risk for catastrophic wildfire. The actual treatment units associated with my decision are located in the portions of the Smith Creek WUI that are in the closest proximity to residences, other structures, and primary transportation routes.

Legal Requirements

My decision adheres to all of the following legal requirements:

Endangered Species Act (ESA) of 1973

Under Section 7 of the Endangered Species Act, each Federal agency must ensure that any action authorized, funded or carried out is not likely to jeopardize the continued existence of any threatened or endangered species. The action alternatives are “*not likely to jeopardize*” the gray wolf. There are no plants listed as threatened or endangered in the project area. No concurrence is needed from the US Fish and Wildlife Service for the 10J rule non-essential experimental species (gray wolf). An analysis of effects on lynx was conducted for this project and included in the Environmental Assessment wildlife report; conservation measures in the LCAS (Ruediger and others 2000) and the interagency Conservation Agreement (USDA and USDI 2005, USDA and USDI 2006) were used to assess effects. These conservation measures are more conservative than the recent Northern Rockies Lynx Amendment which does allow vegetation treatment projects within WUI areas with fuel treatment objectives. Regardless, the US Fish & Wildlife Service recently removed the threatened Canada lynx from their list of species that may be present on the Gallatin Forest north of I-90. The Forest Service and US Fish and Wildlife Service jointly determined that the Crazy Mountains are not occupied by lynx. Consultation with the US Fish and Wildlife Service is not required for projects in “unoccupied” habitat.

Executive Order 11990

Executive Order 11990 requires Federal Agencies to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands when carrying out their responsibilities. No floodplains or small wetland areas will be lost or degraded by implementing my decision

Executive Order 12898 – Environmental Justice

Executive Order 12898 directs each Federal agency to make achievement of environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations. The actions taken with my decision will not adversely affect any disadvantaged or minority groups because of the project area’s distance from large population centers and the diffuse level of adverse impacts on any social group. A project such as this will not produce hazardous waste or conditions that might affect human populations.

Federal Noxious Weed Act of 1974 (as Amended) and Executive Order 13112

Control of noxious weeds is required by The Federal Noxious Weed Act of 1974, and by Executive Order 13112, Invasive Species, February 3, 1999. Also, the Gallatin Forest Plan (page II-28) requires the Forest to “confine present infestations and prevent establishing new areas of noxious weeds. Funding for weed control on disturbed sites will be provided by the resource which causes the disturbance.” My decision to implement Alternative 3 will comply with these laws, regulations, policy and Forest Plan direction. Funding for weed control will come from the

value of the timber harvested in conjunction with this project (See EA, Appendix A, Upland Vegetation, pp. A-1 through A-10).

Forest Service Manual (FSM 5150) Fuel Management

The objective of FSM 5150.2 is to identify, develop, and maintain fuel profiles that contribute to the most cost-efficient fire protection and use program in support of land and resource management direction in the forest plan. My decision will create a fuel profile that is safer for the public and firefighters. In doing so, fires will be less difficult to control and fire protection will be more cost-efficient.

The policy associated with FSM 5150.3 is to integrate fuel management and fire management programs in support of resource management objectives. Several resource management objectives will be met with the project as well as meeting the fuel management objectives.

Forest Service Manual (FSM) 2526 Riparian Area Management

Riparian ecosystems are defined as a transition area between the aquatic ecosystem and the adjacent terrestrial ecosystem; identified by soil characteristics or distinctive vegetation communities that require free or unbound water. For the Smith Creek Vegetation Treatment Project, the Selected Alternative was designed to comply with Forest Service Manual 2526 objectives and policy.

Migratory Bird Treaty Act of 1918, as Amended

On January 10, 2001, President Clinton signed an Executive Order outlining responsibilities of federal agencies to protect migratory birds. On January 17, 2001, the USDA Forest Service and the USDI Fish and Wildlife Service signed a Memorandum of Understanding to complement the Executive Order. Upon review of the information regarding neotropical migratory birds in the wildlife report and project file, the vegetation and stewardship treatments will not result in a loss of migratory bird habitat or be an extirpation threat to any migratory birds.

Multiple-Use Sustained-Yield Act of 1960 (16 U.S.C 528)

The Multiple Use Sustained Yield Act of 1960 states "it is the policy of the Congress that the National Forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes". My decision to implement Alternative 3 will be in compliance with this act and will provide for continued opportunities for the above-mentioned resource areas into the future.

National Environmental Policy Act of 1969, as amended (NEPA)

The National Environmental Policy Act (NEPA) of 1969 requires an assessment of the impacts of human activities upon the environment. NEPA establishes the format and content requirements of environmental analysis and documentation. The entire process of preparing this EA was undertaken to comply with NEPA.

National Forest Management Act of 1976 (NFMA)

The National Forest Management Act (NFMA) requires that Forest plans "preserve and enhance the diversity of plant and animal communities...so that it is at least as great as that which can be expected in the natural forest" (36 CFR 219.27). Furthermore, implementation regulations for the NFMA specify that, "Fish and wildlife habitat shall be managed to maintain viable populations of existing native and desired non-native vertebrate species in the planning area".

There are currently 10 terrestrial species identified as "Sensitive" that are known or suspected to occur on the Gallatin National Forest (USDA 2004). With the implementation of the action alternatives, vegetation and stewardship treatments will have "no impact" on peregrine falcon, trumpeter swan, harlequin duck, and black-backed woodpecker. The determination for flammulated owl, goshawk, Townsend big-eared bat, and wolverine for the action alternatives will be "may impact individuals or habitat, but will not likely contribute to a trend toward federal listing or cause a loss of viability to the population or species".

There will be "no impact" on two species recently designated as sensitive due to their delisting under the Endangered Species Act: grizzly bear and bald eagle. Prior to the delisting, no analysis was needed for grizzly bear in the Crazy Mountain Range, north of I-90; the project area is not located within a Bear Management Unit in the Recovery Plan or in occupied habitat. This species was not addressed further. The bald eagle was addressed as "threatened" and the alternatives were found to have "no effect" as the project will not affect nesting or foraging habitat.

The three fish and amphibian species that have potential habitat in the analysis area were analyzed in the EA (pp. A-32 & A-33). Implementation of the Smith Creek Project Alternative 3 will have "no impact" or will result in a "beneficial impact" to aquatic/ riparian habitat if any or all of Road Treatments B and or C are able to be funded and implemented. Surveys for western toads and northern leopard frogs suggest that they are not present in the project area. Habitat degradation is not likely to occur for these species because little riparian disturbance will occur as a result of the project.

There will be "no impact" to sensitive plants within the treatment areas due to lack of potential suitable habitat or absence of plants based on completed surveys.

National Historic Preservation Act of 1966 (NHPA)

The Forest Service is mandated to comply with the National Historic Preservation Act (as amended 1993) [Public Law 89-665], (26CFR800.1) on such undertakings that affect properties included in or eligible for inclusion to the National Register of Historic Places (NRHP). NRHP eligible sites affected by an undertaking must either be protected in-place or adverse impacts must be mitigated. My decision to implement Alternative 3 will comply with the National Historic Preservation Act (See EA, pp.A-82 through A-84).

The State of Montana Water Quality Act (1969, 1975, 1993, 1996)

The State of Montana Water Quality Act requires the state to protect, maintain, and improve the quality of water for a variety of beneficial uses. Section 75-5-101, MCA established water quality standards based on beneficial uses. The Montana Department of Environmental Quality has designated all non-wilderness surface waters in the project area as B1 Classification. Waters classified as B1 must be suitable for drinking, culinary, and food processing purposes after conventional treatment; bathing, swimming and recreation; growth and propagation of salmonid fishes and associated aquatic life, waterfowl and furbearers; and agricultural and industrial water supply. A 5 NTU turbidity increase above naturally occurring turbidity is allowed in B1 waters. My decision is in compliance with the Montana Water Quality Act and Administrative Rules of Montana, State of Montana Best Management Practices, WQLS/TMDL constraints, as well as Gallatin NF Forest Plan direction for water quality protection. Sediment modeling indicates that project sediment changes are immeasurable and well within the Gallatin NF sediment guidelines.

Clean Water Act of 1977

The objective of this act is to restore and maintain the integrity of the nation's waters. This objective translates into two fundamental goals: (1) eliminate the discharge of pollutants into the nation's waters; and (2) achieve water quality levels that are fishable and swimmable. This act establishes a non-degradation policy for all federally proposed projects. My decision will assure continued compliance with the Clean Water Act, which provides overall direction for protection of water from both point and non-point sources of water pollution (see EA, pp. 3-19 through 3-30).

Clean Air Act of 1963

Congress passed the Clean Air Act in 1963, and amended it in 1972, 1977, and 1990. The purpose of the act is to protect and enhance air quality while ensuring the protection of public health and welfare. The act established National Ambient Air Quality Standards (NAAQS), which must be met by state and federal agencies, and private industry. The Montana DEQ is currently cooperating with the Western Regional Air Partnership (WRAP) to establish visibility goals, monitoring plans, and control measures to comply with regional haze visibility standards in all Montana Class I areas including Yellowstone National Park. The Gallatin NF Forest Plan in Forest Wide Standards pp. II-23 requires that the Forest will cooperate with the Montana Air Quality Bureau (now DEQ) in the SIP and smoke management plan. By limiting the timing, quantity, and intensity of the burning activities as described in the EA Chapter 2 (mitigation), Alternative 3 will comply with the air quality laws, guidelines and standards.

Trout Unlimited Settlement Agreement

The goals, policies and objectives for aquatic resources outlined in the Forest Plan have been further defined within an agreement with the Madison-Gallatin Chapter of Trout Unlimited (TU) in 1990. The intent of the Agreement was to provide more specific direction on timber harvest in riparian areas. Design features and mitigation have been incorporated into the Smith Creek Project to assure that all alternatives adhere to the TU Settlement Agreement (See EA, pp. 2-30 through 2-31).

Land Use Strategy for WCT and YCT

The Upper Missouri Short Term Strategy for Conserving Westslope Cutthroat Trout (UMWCT short term strategy) was finalized into a “Land Use Strategy” in April 2001. During the March 21st, 2002, GLT meeting, a decision was made to apply the finalized Land Use Strategy for implementing the 1999 MOU and Conservation Agreement for WCT in Montana to YCT populations on the Gallatin National Forest. The Strategy calls for preventing habitat degradation and improving existing populations and their habitat until a long-term recovery strategy can be established and implemented. The Strategy ensures that land-use activities, like timber sales, will be implemented in a manner that results in a “beneficial impact” or “no impact” biological decision. The habitat management guidelines outlined in the TU Settlement Agreement (i.e., manage habitats at a level of at least 90% of their inherent potential) serve as the reference level associated with impact determinations.

Implementation of the Smith Creek Project Alternatives 3 will have “no impact” or will result in a “beneficial impact” in aquatic/ riparian habitat if any or all of Road Treatments B and or C are able to be funded and implemented.

Cooperative Conservation Agreement for Yellowstone Cutthroat trout within Montana.

In 1998, the Gallatin and Custer National Forests joined numerous other agencies and the Crow Tribe in forming the Cooperative Conservation Agreement for Yellowstone Cutthroat Trout within the state of Montana. This agreement establishes a framework of cooperation between the participating parties to work together for the conservation of YCT. The primary goal of the Agreement and accompanying Yellowstone Cutthroat Trout Conservation program is to ensure the persistence of the Yellowstone cutthroat trout subspecies within the historic range in Montana at levels and under conditions that provide protection and maintenance of both the intrinsic and recreational values associated with the subspecies. A commitment identified in the Agreement that is most relevant to my decision is “modify land uses to provide the greatest degree of habitat and population protection”. Habitat and populations of Yellowstone cutthroat trout will be protected with implementation of Alternative 3.

Executive Order 12962 (June 1995)

Section 1. Federal Agencies shall, to the extent permitted by law and where practicable, and in cooperation with States and Tribes, improve the quantity, function, sustainable productivity, and distribution of U.S. aquatic resources for increased recreational fishing opportunities. Implementation of Alternative 3 will help to restore water quality and habitat degradation for fisheries by improving key roads in the project area that serve as sediment sources.



IX. Revised Finding of No Significant Impact (40 CFR 1508.27)

I have reviewed the direct, indirect and cumulative effects of the proposed activities and alternatives documented in the Environmental Assessment (EA) and the information provided with the Supplemental EA (including public comments, and Forest Service responses) for the Smith Creek Vegetation Treatment Project and determined that these actions will not have significant impacts on the quality of the human environment. Thus, an environmental impact statement will not be prepared. The implementing regulations for NEPA at 40 CFR 1508.27 provide criteria for determining the significance of effects. This provision requires consideration of both the context and intensity of predicted effects in determining significance. I based my finding on the following:

(a) **Context.** I have determined that the appropriate context for weighing the significance of impacts was within the general vicinity of the project area including the Smith Creek watershed. I came to this conclusion because the disclosure of effects in the EA found the actions limited in context. The project area is limited in size and the activities limited in duration. Effects are local in nature and will not affect resources at a regional or national scale.

(b) **Intensity.** In accordance with 40 CFR 1508.27(b) my determination that the severity of impacts were not significant was based on consideration of the following 10 factors. Additional information provided through the mapping and analysis of key habitat components for elk in the Supplemental EA, as required by Judge Molloy's October 30, 2008 Court Order, did not change my determination as follows:

1. Impacts that may be both beneficial and adverse.

Implementation of the Selected Alternative (Alternative 3) would include a combination of mechanical and hand thinning on up to 800 acres of densely stocked National Forest System lands. Slash and landing piles will be burned in accordance with Montana Air Quality Standards (EA, pp. A-85 through A-90). Prescribed burning will be utilized to selectively thin approximately 300 acres that lie within the Smith Creek WUI. A site specific burn plan writing process utilizing weather and fire behavior models to determine the most optimal time period (also referred to as a window) the meet the burn objectives with the lowest possible risk of escape will be incorporated. As apart of the burn plan, a comprehensive site specific "Risk" and "Potential Consequences" analysis will be developed. The "Risk" and "Potential Consequences" ratings are used to determine an overall management risk associated with the project.

Alternative 3 has been designed to be responsive to the effects of thinning, pile burning, and prescribed burning on the various resources present within the analysis area boundaries. By applying the mitigation outlined in the EA (pp. 2-30 through 2-39), there will be no significant adverse impacts to resources associated with this decision (EA, Chapter 3, p. 3-14 through 3-16). Effects to elk were reevaluated in the Supplemental EA by analyzing project impacts to elk hiding cover associated with key habitat components. It was determined that wildlife issues associated with the implementation of the actions were not significant and hiding cover associated with key habitat components will be maintained. Even though forested areas will be

thinned and wood fiber removed, these resources are recoverable within a relatively short timeframe. Additional beneficial effects will result from the implementation of Alternative 3 for public and firefighter safety, certain wildlife habitats, and for Yellowstone cutthroat trout.

2. The degree to which the action affects public health or safety.

The selected alternative is consistent with the Park County Community Wildfire Protection Plan which was approved in January of 2007. Implementation of the selected alternative would not create significant negative effects to public health and safety (air quality, water quality, recreation, special uses, transportation) due to the use of effective project design and mitigation measures as described in the EA (pp. 2-30 through 2-38). No new information included in the Supplemental EA changed my opinion or led me to believe that there would be significant effects to public health or safety. Project implementation would actually improve public health and safety by breaking up the continuous vertical and horizontal fuels, thus reducing the probability of a catastrophic crown fire in the WUI. The vegetation treatments were designed to reduce fuels along the main evacuation routes in the WUI, which would also improve public and firefighter safety.

3. Unique characteristics of the geographic area.

The Project Area is located on the west side of the Crazy Mountains along the northeast corner of the Livingston Ranger District; approximately 35 miles north of Livingston, Montana in the Smith Creek drainage. The Park County Community Wildfire Protection Plan (Project File), completed in spring of 2006, identified the Smith Creek drainage as a wildland urban interface (WUI) that is at risk from potential wildfire.

The section of the Crazy Mountains where this fuels reduction project is proposed offers scenery that is typical of many mountainous areas in Montana. In the viewsheds specific to this project, there are some visually scenic topographic landmarks, such as Goat Mountain, Scab Rock and Bear Mountain. Dense conifer stands cover the flat and rolling terrain, intermittently broken by open meadows and some talus slopes on ridges. There are infrequent stands of deciduous trees such as aspen or cottonwood, especially in wetter areas and along the streams that add visual interest and variety.

Smith Creek and the East Fork of Smith Creek flow through the project area. There would be no significant effects to wilderness or inventoried roadless areas as discussed in the EA, (Appendix A, Section D-Recreation, pp. A-14 through A-24). There are no Wild & Scenic Rivers or ecologically critical areas known to occur within the analysis area boundaries. Information provided in the Supplemental EA showed no additional unique characteristics to be present in the project area. From the analysis completed, I conclude that there are no unique characteristics of the geographic area that will be affected by this decision.

4. The degree to which the effects of the decision on the quality of the human environment are likely to be controversial.

Observations of past thinning and prescribed burning on the Gallatin National Forest lead me to conclude that the effects of this decision are likely to be predictable and consistent with the conclusions reached in both the EA and the Supplemental EA. There is no professional or scientific disagreement on the scope and effects of the selected alternative on the various resources. For these reasons, I conclude that there is not likely to be significant controversy over the degree to which this decision affects the quality of the human environment.

5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

Effects of thinning in Wildland Urban Interface areas have been documented and monitored nationwide (An Assessment of Fuel Treatment Effects on Fire Behavior, Suppression, Effectiveness, and Structure Ignition on the Angora Fire, August 2007, Project File Vol. 2, Doc. 8-12). Thinning of various size classes of forested stands on the Gallatin National Forest has occurred for the past four decades with results that have been relatively consistent and predictable. Historically, prescribed fire has been utilized by all Federal land management agencies for a multitude of resource objectives such as: brush disposal, wildlife habitat enhancement, slash disposal, etc. The past year alone, Federal land management agencies successfully completed 22,878 prescribed burns totaling 2,856,939 acres. The Forest Service accounted for a little less than half of the total National Forest System lands treated (1,151,095 acres), none of which resulted in escaped fire situations. The Meadow Creek burn plan writing process would utilize weather and fire behavior models to determine the most optimal time period (also referred to as a window) to meet the burn objectives with the lowest possible risk of escape. The models are also used to determine rates of spread, crown scorch, and tree mortality. This information is utilized to determine the number of ignition and holding personnel required to ensure the unit does not escape its boundaries. The prescribed burn would underburn the existing stands with low intensities and moderate severity. Prescribed fire techniques would utilize fire's natural nutrient recycling mechanism and ecological processes, which would better protect the stands against a future catastrophic wildfire that could result in total deforestation. The information provided in the EA and Supplemental EA support my conclusion that actions proposed under my decision have been used in the past and have proven effective. For these reasons, I conclude this decision will not present highly uncertain, unique, or unknown risks.

6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

My decision to thin and allow prescribed burning to reduce fuels in the Smith Creek Wildland Urban Interface as outlined in the EA and Supplemental EA is project specific. The actions associated with project implementation will be monitored and success in achieving the Purpose and Need for the project will be assessed. Although successful implementation of the project could lead to future projects on the Forest that are similar in nature, I do not foresee that this decision establishes a precedent for any other future actions, nor does it represent a decision in principle about any other future consideration.

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

The reasonably foreseeable cumulative effects associated with this decision are detailed in the EA (Chapter 3 and Appendix A) for the various resources that could be affected by the project. Effects to elk were reevaluated in the Supplemental EA by analyzing project impacts to elk hiding cover associated with key habitat components. It was determined that wildlife issues associated with the implementation of the proposed actions were not significant and hiding cover associated with key habitat components will be maintained. From these analyses, I conclude that neither the effects of this decision itself, nor cumulative or linked effects of past, current, or reasonably foreseeable future actions appear likely to lead to significant cumulative impacts.

8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in, or eligible for listing in, the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historic resources.

There is one historic site that has been found in the Smith Creek project area. Prehistoric sites are rare in the lower elevations of the Crazy Mountains with most prehistoric sites occurring at high prominences. Several sites have been recorded in the drainage but not near the treatment units. There is potential for historic sites related to early sheepherding, homesteading, and logging operations, but none have been documented.

The design measures associated with the action alternatives for site protections (EA, p. 2-39) can easily be implemented so that no direct or indirect affects would result from the treatments prescribed in the units. See EA, (Appendix A, Section I, pp. A-82 thruA-84) for further details. In addition, there is nothing in the Supplemental EA that would give reason to believe that the project would cause loss or destruction to any scientific, cultural, or historic resources.

9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

My decision to proceed with implementation of Alternative 3 would not adversely affect any endangered or threatened species or their habitat. It was not necessary to prepare a Biological Assessment for this project because the bald eagle and grizzly bear have been de-listed (See SFWS Threatened, Endangered, and Candidate Species for the Gallatin National Forest 11/5/07); the project area is outside of lynx habitat, and there was a “not likely to jeopardize” determination for the experimental, non-essential gray wolf. The Selected Alternative is “*not likely to jeopardize*” the gray wolf (No concurrence is needed from the US Fish and Wildlife Service for the 10J rule non-essential experimental species gray wolf). An analysis of effects on lynx was conducted for this project and included in the Environmental Assessment wildlife report; conservation measures in the LCAS (Ruediger and others 2000) and the interagency Conservation Agreement (USDA and USDI 2005, USDA and USDI 2006) were used to assess effects. These conservation measures are more conservative than the recent Northern Rockies Lynx Amendment which does allow vegetation treatment projects within WUI areas with fuel treatment objectives. Regardless, the US Fish & Wildlife Service recently removed the threatened Canada lynx from their list of species that may be present on the Gallatin Forest north

of I-90. The Forest Service and US Fish and Wildlife Service jointly determined that the Crazy Mountains are not occupied by lynx. Consultation with the US Fish and Wildlife Service is not required for projects in “unoccupied” habitat. There are no plants listed as threatened or endangered in the project area. Also see consistency with Endangered Species Act of 1973 (p. 28). Because the Supplemental EA was narrow in scope, concentrating on mapping key habitat components for elk, information displayed in the supplement gave me no reason to believe that there would be adverse effects to any T&E species.

10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

Applicable laws, regulations, and Forest Plan direction related to my decision are discussed in the EA by resource in Chapter 3 and Appendix A and in the Decision Notice (pp. 24-33). Court Order CV 08-92-M-DWM from the US District Court of Montana, Missoula Division cited on page 12 “The Forest Service complied with the Forest Plan and did not violate NFMA and NEPA, with exception of the requirement to map key habitat components for elk”. A Supplemental EA was prepared and sent to interested parties. Effects to elk were reevaluated by analyzing project impacts to elk hiding cover associated with key habitat components. I find my decision to be fully in compliance with applicable laws and regulations. Further, my decision is consistent with the Gallatin Forest Plan Management Area direction for the project area.

X. Implementation

Implementation of my decision to reduce hazardous fuels and implement vegetation treatment under the conditions of Alternative 3 of the Smith Creek Vegetation Treatment Project will likely begin in the fall of 2009 and could continue for up to four years.

XI. Appeal Rights

In accordance with 36 CFR 215.11(b) this reaffirmation of my prior December 18, 2007 decision for the Smith Creek Vegetation Treatment Project is not subject to administrative appeal. The above regulation provides for appeals of a new Decision Notice after revision of an EA, pursuant to FSH 1909.15, Chapter 10, Section 18, “However, only that portion of the decision that is changed is subject to appeal”. I have thoroughly reviewed the original decision for the project in conjunction with information provided in the Supplemental EA, public comments, and Forest Service responses to those comments, and have determined that my original decision will remain in effect and unchanged.

/s/ Ron J. Archuleta

3/06/2009

Deleted: 2/13/2009

RON J. ARCHULETA
District Ranger
Livingston Ranger District

Date

Appendix A

Responses to Supplemental EA Comments

INTRODUCTION

This appendix to the Smith Creek Vegetation Treatment Project Revised FONSI contains the agency's responses to questions and comments received during the 30-day public review and comment period for the November 2008 Supplemental Environmental Assessment. Official comments regarding the information in the supplement were due on December 24, 2008.

A total of 6 letters were received. Table 1 below lists the letter number and commenter. Comments are grouped by subject matter. Each comment is identified by letter number first and then by individual comment number after the hyphen (Example 1-1). The comments were transcribed as written in the comment letters with the agency response following the comment. Some comments are repetitive, so responses to these comments will refer to previous letters where that specific comment has already been addressed in this appendix. Identical comments have been grouped, showing the letter and comment numbers that apply.

Table 1-Letters and Comments received in response to the November 2008 Supplemental Environmental Assessment

LETTER NUMBER	COMMENTER
1	Larry Tobin
2	Sharon Hapner
3	Ron & Janet Hartman
4	Sharon Hillman
5	Sara Jane Johnson, Native Ecosystems Council
6	Alliance for the Wild Rockies

RESPONSE TO COMMENTS

GENERAL

Comment 2-6. Some potentially major changes to the proposed treatment areas were presented in the Supplement with virtually no explanation or justification other than a stated, new-found desire to increase reserves and clumps. Why was Unit I dropped and Unit J changed to hand treatment? Why wasn't Units c and D modified to hand treatment? These changes require detailed explanation and justification.

Response: The November 2008 Supplemental Smith Creek Vegetation Treatment Project EA was prepared in response to Montana Federal Court Judge Molloy's order (CV 08-92-M-DWM) of October 30, 2008, which specifically states "While the Forest Service has complied with the law for the most part, it is deficient regarding mapping of key habitat components for elk. Consequently, in the absence of that mapping, it is impossible to fashion a remedy that could permit the project to go forward." On page 34 of that order, Judge Molloy clearly states, "It is further ordered that the **Defendants** are ENJOINED from commencing the Project and the matter is REMANDED to conduct mapping of key habitat components for elk". The Supplemental EA is accordingly very narrowly focused to address these deficiencies.

However in response to your comment, it is common that **boundaries for actual units laid out on the ground vary somewhat, but are the same acreage or smaller, and within the effects of those that were mapped and analyzed through the NEPA process**. These **particular practical modifications are needed** due to topographic features and/or operational concerns encountered by the timber sale layout crew. **All units displayed in the Supplemental EA are within the physical boundaries and within the scope of the effects analyzed in the EA.** Unit I was not included in the current stewardship contract due to **lack of access**. Unit J was not changed and remains a prescribed burn with hand **treatment** to create an adequate fuel bed to carry the burn. Unit C was **not changed and is already hand-treatment**. Unit D **was not changed and was analyzed as a commercial thinning because the current fuel levels require removal of commercial size trees to achieve the desired fuel levels.**

Comment 3-1: It is important to realize that the local residents were involved in meetings and field trips for the project and the overwhelming majority are "for" this project as they understood and realized future benefits.

Response: Thank you for your involvement, as well as the involvement of numerous other local residents in helping to design the proposal. We appreciate your support for the project.

Comment 3-6: The project will not harm elk and will benefit the health of the forest and provide a range of protection and safety for residents, fire teams, forest service personnel, hunters, and all users of the forest.

Response: Thank you for your support. The above-mentioned benefits are the primary purpose and need for the project.

Comment 6-1: THE Forest Service must prepare a full Environmental Impact Statement for the Smith Creek Project. In its October 30, 2008 Order, the United States District Court for the District of Montana, Missoula Division, ruled that the Forest Service violated the federal National Forest Management Act (NFMA) by violating the Gallatin National Forest Land & Resource Management Plan (Gallatin Forest Plan)...Thus, because the Forest Service violated a federal environmental law, this Project is a significant action. 40 C.F.R. 1508.27 (10)...In light of its significance, any future version of this timber sale project must be thoroughly analyzed in a full Environmental Impact Statement (EIS)...The Forest Service's initial supplemental analysis for the Smith Creek Project fails this legal requirement because it is presented as a supplemental Environmental Assessment, instead of an Environmental Impact Statement.

Response: The October 30, 2008 Court Order GRANTED for Plaintiffs with respect to mapping of key habitat components for elk and DENIED as to all other claims. The matter was REMANDED to the Forest Service to conduct mapping of key habitat components only, which is a NFMA deficiency. The Court did not order that an EIS be prepared. NEPA only requires federal agencies to prepare an EIS for any proposed action "significantly" affecting the quality of the human environment. The absence of significant environmental effects allows a federal agency to prepare a Finding of No Significant Impact (FONSI) in accordance with Forest Service Handbook (FSH) 1909.15, Chapter 10, Section 18.4.

Key habitat components were mapped and analyzed for this project in a Supplemental EA. The interested public was given an opportunity to comment on the Supplemental EA. There was nothing that was found in the mapping, analysis, or public comments that gave the Forest Service specialists reason to believe that there would be any significant environmental effects caused by implementation of the project. Therefore a Revised FONSI was prepared for the project and an EIS is not required.

Comment 6-2: The Forest Service must publish a new decision for the Smith Creek Project and allow the public to file administrative appeals of that decision. If the Forest Service fails to comply with its legal duty to complete an EIS for the Smith Creek Project, it still must issue a new decision for the Project and allow the public to administratively appeal that decision before going forward with this timber sale...Thus, to comply with NEPA's implementing regulations, the Forest Service must follow these same procedures for the supplemental EA or EIS...It must publish a new decision and allow administrative appeals of that decision... Therefore, because the Court ruled that the Forest Service violated the law, and because the Court did not provide the Forest Service with the option of returning to court to ask for dissolution of the injunction, the Court's judgment was final and the original Decision Notice/Finding of No Significant Impact (DN/FONSI) was set aside by law. 5 U.S.C. 706(2). The only way the Smith Creek Project may now go forward is if the Forest Service publishes another decision, and hears the administrative appeals of that decision.

Response: Key habitat components were mapped and analyzed for this project as required by the Court Order and included in a Supplemental EA for the project. The interested public was given an opportunity to comment on the Supplemental EA. There was nothing that was found in the mapping, analysis, or public comments that gave the Forest Service specialists' reason to believe that there would be any significant environmental effects caused by implementation of the project. Therefore, an Environmental Impact Statement

is not needed and a Revised Finding of No Significant Impact (FONSI) was prepared in accordance with Forest Service Handbook (FSH) 1909.15.

The handbook also states, “Reconsider the original decision, and based upon the EA and FONSI, issue a new decision notice or document that the original decision is to remain in effect and unchanged.” The responsible official thoroughly reviewed the original decision for the project in conjunction with information provided in the Supplemental EA and Revised FONSI, and considered public comments and Forest Service responses to the Supplemental EA. After doing so he concluded that his original decision would remain in effect and unchanged. 36CFR 215.11(b) provides for appeals of a new Decision Notice after revision of an EA, however, “only that portion of the decision that is changed is subject to appeal”. There were no changes made in the decision for the Smith Creek project and therefore it is not subject to appeal.

Comment 6-6: In its new EIS, the Forest Service must address all the issues raised by Alliance for the Wild Rockies, Native Ecosystem Council, and Sharon J. Hapner in the original administrative proceedings and the subsequent litigation over the Smith Creek Project.

Response: The Forest Service found no reason nor was it ordered by the Court to prepare an EIS for the project. See response to Comment 6-1. The court order states “The matter is Remanded to the Forest Service to conduct mapping of key habitat components for elk” (A NFMA deficiency). The mapping was completed and presented in a Supplemental EA to interested parties for a 30-day comment period. Comments regarding this supplement were received from six individuals or groups. These comments and Forest Service responses are an attachment to the revised FONSI for the project and are being mailed to the six commenters. All past issues raised by the Alliance for the Wild Rockies, Native Ecosystems Council, and Sharon Hapner have been addressed by the Forest Service in the appropriate fashion throughout the original administrative proceedings and subsequent litigation.

Comment 6-7: In its new EIS for the Project, the Forest Service must take a hard look and discuss the responsible opposing views of scientists whose published papers undermine the central underlying assumption of the Smith Creek Project.

Response: Page 31 of the October 30, 2008 Court Order, Item D states “The Forest Service did not violate NEPA with its policy of timber harvest in the Project area. 1. The Forest Service policy underlying the Project is rationally based. The Project is intended to modify wildfire behavior, provide for safer firefighter response and public evacuation, and decrease tree densities. The Forest Service supported its conclusions that the Project would accomplish the stated objectives...While the Forest Service policy of reducing wildfire danger by thinning is debatable on this record; it is rational and does not violate NEPA. It is also a matter within the expertise of the agency”.

Comment 6-8: In its new EIS for the Project, the Forest Service must take a hard look at how climate change affects and is affected by this Project

Response: The Court order on pp. 32-33 states “NEPA does not categorically require an analysis of how environmental factors such as climate change may impact an action. Instead NEPA requires a “hard look” at the impacts of an action and a reasonably thorough discussion of the significant aspects of the probable environmental consequence...There is no evidence to show that the Project would directly impact climate change. The Forest Services decision not to consider climate change in its analysis of the project did not violate NEPA.”

Comment 6-9: In its new EIS for the Project, the Forest Service must discuss why the proposed commercial logging in riparian areas does not violate the legally binding settlement agreement with Trout Unlimited.

Response: Conclusions in the Decision Notice and FONSI (AR 1-7) regarding *Fisheries* were made after careful consideration of the effects analysis presented in the EA (AR 1-1) on pp. 3-31 through 3-52 and in the fisheries specialist report (AR 11-7). Page 33 of the Decision specifically addresses adherence of the Project to the Trout Unlimited Settlement Agreement. Page 9, Item 4. of the Court Order states “The EA shows that sedimentation from the Project will not impact Yellowstone cutthroat trout.”

GENERAL WILDLIFE HABITAT

Comment 5-1: The hiding cover and key component analysis in the supplement only addresses elk. Yet the GFP standard is for big game species including deer and moose.

Comment 5-2: Although elk is an indicator species for big game, limiting analysis to just this indicator species will be inappropriate if this species is not present while other big game species it indicates are present such as moose winter habitat and how it will be affected by this project.

Response to Comments 5-1 & 5-2: It is correct that the Gallatin Forest Plan identifies elk as the management indicator species (MIS) for big game FP II-19). The Forest Plan further defines “indicator species” as “Species identified in a planning process that are used to monitor the effects of planned management activities on viable populations of wildlife and fish, including those that are socially or economically important”. Therefore, the Forest Plan designated elk as a MIS species for big game habitat under the premise that by managing for productive elk habitat, we will be managing for other big game species. Deer and moose are present in the project area and were considered in the EA, but the analysis focused on elk based on this premise.

In addition, the November 2008 Supplemental Smith Creek Vegetation Treatment Project EA was prepared in response to Montana Federal District Judge Molloy’s Court Order CV 08-92-M-DWM of October 30, 2008, which specifically states, “While the Forest Service has complied with the law for the most part, it is deficient regarding mapping of key habitat components for “*elk*”. On page 34 of the order, Judge Molloy clearly states, “It is

further ordered that **Defendants** are ENJOINED from commencing the Project, and the matter is REMANDED to the Forest Service to conduct mapping of key habitat components for elk.” The order requires the Forest Service to map key habitat components per the Gallatin Forest Plan standard 6.a.5 (p. II-18). Those habitat components include: moist areas, foraging areas, critical hiding cover, thermal cover, migration routes, and staging areas. Hiding cover was mapped through Timber Stand Management Recordkeeping System (TSMRS) and this information was presented in the Smith Creek Vegetation Treatment Environmental Assessment (EA) (USDA 2007) (refer to Map 5).

ELK HABITAT COMPONENTS

General

Comment 1-1: I have owned a cabin in Smith Creek area for eight years that I spend 2-3 months a year at. I spend a great deal of time scouting for elk at various times of the year (July, September, February) and am very familiar with every drainage in the area. In the eight years, I have never seen an elk in the project area. I have seen occasional tracks, but the area is not primary or usual elk habitat. It is too close to cabin sites, roads, and humanity. If anything, the proposed project would make the area more attractive as potential elk habitat and I don't believe it would have any detrimental impact on elk populations. I hope the project will be completed as soon as possible.

Response: Thank you for your field observations regarding elk usage as a resident of the project area and avid elk hunter. We appreciate your support for the project.

Comment 2-1: This document, as well as the EA and FONSI has totally omitted any consideration of ecology changes in the Smith Creek area, a direct result of climate change during the past ten years, that have had a significant impact on elk habitat.

Comment 2-3: I am seriously concerned that the TSMRS computer modeling system that has been used to map habitat may be seriously out of date because no component allows for consideration of recent climate change effects.

Response: The November 2008 Supplemental Smith Creek Vegetation Treatment Project EA was prepared in response to Montana Federal District Judge Molloy's Court Order CV 08-92-M-DWM of October 30, 2008, which specifically states, “While the Forest Service has complied with the law for the most part, it is deficient regarding mapping of key habitat components for “*elk*”. Consequently, in the absence of that mapping, it is impossible to fashion a remedy that could permit the project to go forward.” On page 34 of that order, Judge Molloy clearly states, “It is further ordered that the Defendants are ENJOINED from commencing the Project and the matter is REMANDED to conduct mapping of key habitat components for elk”. The Supplemental EA is accordingly very narrowly focused to address these deficiencies.

The Court order on pp. 32-33 states “NEPA does not categorically require an analysis of how environmental factors such as climate change may impact an action. Instead NEPA

requires a “hard look” at the impacts of an action and a reasonably thorough discussion of the significant aspects of the probable environmental consequence...There is no evidence to show that the Project would directly impact climate change. The Forest Services decision not to consider climate change in its analysis of the project did not violate NEPA.”

Furthermore, TSMRS forest classes are based on categories for crown closure and size class that would not be expected to change dramatically over time or with relatively subtle changes in environmental conditions.

Comment 2-4: The Supplemental EA states that habitat was also analyzed on field trips to the area but presents no dates, paradigm for the analyses, staff qualifications, or raw data to support the claim.

Response: As described in the Supplemental EA, the maps provided to display key habitat components were developed initially through a modeling exercise. The Timber Stand Management Record System (TSMRS) was queried for all stand polygons that met criteria for each component (Key Habitat Components for Elk, November 2008). The Supplemental EA states “Additional moist areas were mapped based on field visits.” The moist sites noted in the field were in addition to what the TSMRS queries selected. To further verify habitat components selected by modeling, the district wildlife biologist spent November 4th and 7th in the field to validate additional moist area locations that were previously observed, but did not show up in the TSMRS query. These areas were then mapped electronically by creating an ArcMap shapefile with National Agriculture Imagery Program (NAIP) background. This was an effort to document additional moist areas found from the field visits, along with the TSMRS modeled components on the maps included in the Supplemental EA. Not every field visit made by the district wildlife biologist since the beginning of project development in 2006 was documented, however several were included in the AR Chapter 5, and all field visits contributed to information that was incorporated into the development of unit design, ongoing analysis, and mapping. Moist areas that occur within units were already identified for protection through mitigation identified in the EA (Chapter 2-34& 35). Also see the Response to Comment 5-27.

Comment 4-5: If there was that many elk hanging around the area, the bagging percentage would not be so low as to extend the hunting season a full three weeks.

Response: Thank you for your observations and comments

Comment 5-22: Please provide information on the bull/cow ratio for hunting district 315 and discuss whether or not there are currently any bull vulnerability problems within this hunting district.

Response: The Supplemental EA focused on the mapping of key elk habitat components as ordered by the Court. However, both the Supplemental EA and the EA provide information on the current elk populations for Hunting District 315. The most recent 2008 Winter Elk Survey for HD 315 (Lemke, 2008 office memorandum) found the trend count to be the

highest elk count for HD 315 since surveys began in 1974. Specific to bull numbers, annual bull statistics confirm that elk count bull numbers are quite conservative as adult bulls are typically undercounted in all aerial trend surveys. The 2008 sample checked for bulls yielded 10.2%; the typical range for bull numbers has been 6-10%. The Elk Plan objective for number of bulls counted in HD 315 has also been exceeded. This number is thought to be conservative as 53% of elk were not classified by sex, resulting in a low count of bulls. Population management and objectives are specified by Montana Department of Fish, Wildlife, and Parks Management Plans, in this case the Montana Elk Management Plan. Elk population goals have been exceeded for this EMU as elk numbers are 48% above the high end of the objective range. As elk numbers have increased so have harvest levels. Beginning in 2004, HD 315 went to a very liberal 5 week general either-sex elk season, that has been in affect ever since. Also as referenced in the EA, issues addressing big game vulnerability and security cover were also analyzed in the Gallatin National Forest Travel Plan.

Comment 5-23: The supplemental EA claims that there is no calving habitat in the project area. How was this information derived?

Response: The Supplemental EA does state that calving areas do not exist within the Project area based on Geographical Information System (GIS) metadata provided by Montana State Fish, Wildlife, and Parks. This was verified through consultation with a FWP biologist. Incidentally, while calving areas are important, they are not listed as a key habitat component in the FP standard at which the remand was targeted. Also see response to Comment 2-4.

Comment 5-24: The supplemental EA infers that the project area has almost no summer elk use, yet the map provided on big game winter range and migration routes shows the entire analysis area as elk summer range. Isn't that a contradiction?

Response: The Supplemental EA states, "Map 1 clearly indicates that the proposed units are completely within summer range and that there is no winter range, migration routes, or calving areas within the entire project area" and "Summer habitat is generally located in the Upper Smith Creek area at elevations above the Project area depending on the proximity to structures, roads, motorized trails and associated human activity." This information is not contradictory but infers instead that summer habitat is not limiting. Map 1 indicates the extent of summer range across not only the Project area but including much of the Elk Herd Unit 315 and the Crazy Mountain Range to the east and south.

Comment 5-28: How can the agency demonstrate that hiding cover will be maintained around key habitat components if these key components are located in adjacent but unmapped areas?

Response: Areas that were not mapped are adjacent private lands. Forest Plan standards do not apply to private lands. Therefore, the analysis was based on effects to hiding cover on National Forest lands. The supplemental EA reiterated mitigation identified in the EA and DN, explained the effect of final unit boundaries (displayed on Map 4) and determined that hiding cover associated with key habitat components will be maintained. On page 21 of the October 30, 2008 Court Order, Item IV. B. 3. b., Judge Molloy clearly states, "The Forest Service has complied with the limited part of the Forest Plan's requirement to maintain two-thirds elk hiding cover." Also see Response to Comments 3-5 through 6-3 regarding hiding cover.

Moist Areas

Comment 5-25: The supplemental EA says that all moist areas were mapped except for perennial streams. These areas will be key moist areas for all big game species so it is unclear why they were excluded.

Response: The Supplemental EA actually states “Not every perennial stream was mapped” and the reason is “not all streams provide forage, thermal or hiding cover such that they are “key” components.” The Forest Plan standard provides examples of moist areas but no methodology is dictated. The network of streams is clearly visible on Map 1. The Supplemental EA also reiterates the mitigation that was identified in the EA and DN which is pertinent to moist areas.

Comment 5-27: Elk wallows are clearly important staging areas for elk in the fall. The agency can not map these in November, so you basically have left out this key habitat component in your revised analysis.

Response: Moist areas were mapped from a combination of field data that was GPSed in the summer and fall and digitized in Arc Map, TSMRS queries (exams from spring, summer, and fall), aerial photography (taken in July), and NAIP imagery (taken in mid-summer). The Supplemental EA states “There is no place within the analysis area where elk group up that could be identified as a staging area (Tom Lemke, personal communication)”, “Elk move to winter range prior to winter and most years prior to general hunting season”, “Elk population goals have been met for this EMU and are considered to be healthy and widely distributed”, and “Mitigation was recommended to provide quality bow hunting opportunities, to better meet population harvest objectives, and to facilitate fall migration to winter range with a minimum level of disturbance during this time.” Fish, Wildlife, and Parks, which is the agency that has management authority to establish hunting seasons and set harvest limits, had no concerns with the project. Also see the response to Comment 2-4.

Comment 6-5: IN ITS NEW EIS, THE FOREST SERVICE MUST MAP ALL MOIST AREAS IN THE PROJECT AREA. The Gallatin Forest Plan requires that the Forest Service map moist areas, including wallows, through the Project area. Because perennial streams and wallows are “moist areas,” the Forest Service’s failure to map them violated NFMA because it is a Forest Plan violation.

Response: See Response to Comment 5-25.

Thermal Cover

Comment 2-2: The claim in the Supplemental EA that elk do not winter in the area is false.

Response: The Supplemental EA states that “Map 1 clearly indicates that the proposed units are completely within summer range and that there is no winter range... within the

entire project area. According to the EA (USDA 2007), winter range is primarily in lower elevations on private lands. Elk spend winters divided between the Reese Hills and Oil Hills winter range areas.” This information came directly from Fish, Wildlife, and Parks as indicated on Map 1 and the EA.

Comment 3-2: Anyone living within the addressed area of Smith Creek will confirm that elk DO NOT remain in the area in winter.

Response: Thank you for your observations and comments

Comment 4-1: I have resided in this area fulltime for fifteen years. All the northern most elk migrate west and the others go into the Shields River drainage and the Cavanaughs. Elk don't winter here.

Response: Thank you for your observations and comments

Comment 5-3: Could you provide the literature and/or monitoring data whereby the agency has determined that summer thermal cover is not a key habitat component for big game?

Comment 5-4: Although some thermal cover was mapped, it is unclear what information was actually provided. For example, what is the difference between summer and winter cover in the analysis area for big game?

Response to 5-3 & 5-4: The information presenting summer thermal may have been confusing. The Forest Plan and the Supplemental EA defines thermal cover as “cover used by animals to ameliorate chilling effects of weather; for elk and grizzly bear, a stand of coniferous trees 40 feet or taller with an average crown closure of 70 percent or more”. Therefore, thermal cover implies use during the winter. The Supplemental EA states “Summer thermal cover was also mapped (refer to Map 2 and 4) though this is not considered a key habitat component. Summer thermal cover was mapped with the same vegetation components as winter thermal; the only difference was aspect (see AR 9-43). Regardless, “There was no summer thermal cover within the final marked boundaries of units.”

Comment 5-5: The supplement claims there is no summer thermal cover in any harvest unit. Since all thermal cover was not mapped, the public has no basis for reviewing this claim.

Response: The Supplemental EA states “Similar to the other habitat components, thermal cover was modeled using TSMRS... However, elk do not winter within the project area (refer to Map 1)” so thermal cover is not an issue. Also see Response to Comment 5.3 & 5-4.

Migration Routes

Comment 2-5: The discussion of winter migration is also fraught with error and contradiction. Page 4 of the Supplement states that there are no migration routes in the area while bullet 6 on page 5 states that there is a concentrated elk migration in the area.

Response: We agree that the verbage is somewhat confusing in **Bullet 6** , which states that the mitigation is to accommodate the concentrated elk migration in the area, however, this mitigation was included to restrict treatments from occurring between September 1 and October 15 (Unless consultation occurs with MFWFP) in order to hold elk in the area. (Supplemental EA p. 4). Mitigation was recommended to provide quality bow hunting opportunities to better meet harvest objectives, and to facilitate fall migration to winter range with a minimum level of disturbance during this time, not to protect elk from being harvested. Further discussions with (Tom Lemke) from the Montana Department of Fish, Wildlife, and Parks clarify that the “elk actually migrate diffusely in small groups as weather dictates to winter ranges west of the project area”. The discussion of migration routes on p. 4 of the Supplemental EA actually says “In consultation with Montana Department of Fish, Wildlife, and Parks (MDFWP), there was no specific migration route identified”.

Comment 3-4: Those who hunt this area will confirm that almost all elk have left the area in question during the fall season- this is not a wintering area.

Response: Thank you for your observations and comments

Comment 4-3: Migration is usually early winter. They move at night and fairly fast. Any thinning will only aid in their travel and perhaps give them a little more to eat on the way...

Response: Thank you for your observations and comments

Comment 5-29: It appears that the entire analysis area is a dispersed elk migration route. There is only one migration route mapped for the entire area displayed by the map. If so, how do they use the summer range in the Smith Creek analysis area?

Comment 5-30: It is noted in the notes of consultation with MDFWP that there is no concrete data on elk migration. If the agency is required to map elk migration areas and is planning a logging project in the area, it seems imperative to monitor elk habitat use in the area prior to logging especially if the agency is going to meet GFP direction to map important elk habitat.

Comment 6-4: In its new EIS, the Forest Service must map the elk migration route through the Project area. The Gallatin Forest Plan requires that the Forest Service map the elk migration route through the Project area. The November 2008 supplemental analysis is internally contradictory regarding the existence of an elk migration through the area... If elk use the whole project area to migrate through, then the whole area must be mapped as an elk migration route.

Response to 5-29, 5-30, & 6-4: The November 2008 Supplemental Smith Creek Vegetation Treatment Project EA was prepared in response to Montana Federal District Judge Molloy’s Court Order CV 08-92-M-DWM of October 30, 2008, which specifically states, “While the Forest Service has complied with the law for the most part, it is deficient regarding mapping of key habitat components for “*elk*”. The discussion of migration routes on page 4 of the Supplemental EA says “In consultation with Montana Fish, Wildlife, and Parks (MDFWP). There was no specific migration route identified for elk. Elk migrate diffusely in small groups as weather dictates to winter ranges west of the

Project area (Tom Lemke).” The Forest Plan standard does not provide any particular methodology. Map 1 clearly indicates that all elk habitat ranges came from Montana Fish, Wildlife, and Parks at <http://fwp.mt.gov/insidewp/GIS/metadata/elk99.htm> and notes that MFWP does not identify any migration routes within the Smith Creek project area.

Staging Areas

Comment -3-3: There is not a “staging area within the project confines.

Response: Thank you for your observations and comments

Comment -4-2: As far as staging areas, there are none in this area

Response: Thank you for your observations and comments

Hiding Cover

Comment 3-5: The small area in the project is an extremely small percentage of the total area and would not inhibit elk but most likely create new feeding areas. The remaining thousands of acres will still provide excellent hiding cover areas.

Comment 4-4: Hiding cover is not an issue either. The elk don’t inhabit the area, they only move through and the majority of them have been using a trail much higher up on Bear, Scab, and Goat Mountains.

Comment 5-6: Hiding cover was not mapped in the original Smith Creek Decision nor was provided in the Administrative record. The map in the supplemental EA is new information.

Comment 5-7: The map of hiding cover shows that over 5 sections of land were not included in the map, apparently due to lack of TSMRS data. Because of this, the hiding cover map is arbitrary.

Comment 5-8: Since over 5 sections of land within the analysis area were not evaluated for cumulative effects in the original decision, these sections must be addressed in the supplement to show the cumulative effects of past activities on hiding cover.

Comment 5-9: The determination of hiding cover was done with TSMRS data on the basis of canopy cover, with stands having a canopy cover of >40% defined as hiding cover. It is unclear where this definition of hiding cover was derived..

Comment 5-10: It is unclear what either the current or post-logging canopy cover will be in the various harvest units. Please provide information to demonstrate that the canopy cover level within each individual treatment unit will remain over 40% after logging to ensure that the agency’s hiding cover criteria will be maintained.

Comment 5-11: In many of the harvest units it is noted that while the total number of trees left per acre may range from 300 to 500, many of these trees will be in clumps. Have you included these unharvested patches of trees to average out canopy cover over the entire unit?

Comment 5-12: Please define how the post-treatment hiding cover conditions in the planned harvest units was estimated based on past monitoring of logging impacts on hiding cover.

Comment 5-13: If hiding cover will not be affected or lost with the planned treatments, why were unlogged buffers added to some of the units in the supplemental EA.

Comment 5-14: Is aspen considered as a contributor to canopy cover for hiding cover requirements? If so is aspen identified in the TSMRS data?

Comment 5-15: Since aspen lose their leaves in the fall, they are unlikely to contribute to any canopy cover. If they are considered fall cover for elk, what is the basis for this cover quality?

Comment 5-16: The clearcutting of conifers around 100 feet of aspen stands would seem to eliminate hiding cover. What are we missing on this?

Comment 5-17: The agency's claim that logging will not affect hiding cover seems quite arbitrary. After all, the purpose and need of the project is to reduce both canopy and sub-canopy fuels to reduce fire risks. How can you reduce fuels without reducing hiding cover?

Comment 5-18: How specifically will skid trails and piling and jackpot burning of slash affect hiding cover?

Comment 5-19: Most treatments will not only affect the canopy, but will also reduce small to mid-story trees and shrubs. Are these features considered as part of the hiding cover definition and if so why won't understory thinning reduce hiding cover?

Comment 5-20: If hiding cover is lost after logging, the agency's map in the supplemental EA is incorrect because post-logging hiding cover conditions will not have been accurately portrayed.

Comment 5-21: The agency's analysis of hiding cover does not appear to have a patch size component to it: The GFP Amendment #14 notes that hiding cover is a site specific component of security. It is clear that the agency's map and hence analysis of hiding cover is severely flawed due to the absence of a patch size requirement.

Comment 5-26: The highest quality hiding cover or security areas was not mapped. How much security provided by hiding cover will be lost due to logging and burning and will these losses result in levels of security in the analysis area falling below minimum recommended levels (30%).

Comment 5-28: How can the agency demonstrate that hiding cover will be maintained around key habitat components if these key components are located in adjacent but unmapped areas?

Comment 6-3: In its new EIS, the Forest Service must disclose the percent hiding cover associated with all key habitat elements...Specifically, the Forest Service must at least disclose the pre-logging and post-logging percentage hiding cover associated with foraging areas and thermal cover. The Forest Service must also discuss the cumulative impact of how past clearcutting one-third of the Project area has resulted in a loss of hiding cover.

Response to Comments 3-5, 4-4, 5-6 through 5-21, 5-26, 5-28, & 6-3: Hiding cover was addressed in the EA on pp. A-58 through A-61 (AR 1-1: 227-229). Queries run for the elk hiding cover analysis and maps of hiding cover are in the Administrative Record (AR 9-43). Judge Malloy's October 30, 2008 District of Montana, Missoula Division Court Order CV 08-92-M-DWM in Item 3 on page 17 specifically states "The EA does not comply with mapping requirements for elk but does comply with hiding cover and security cover requirements." On pages 20-21 of the order Item b. Hiding Cover Requirements, Judge Molloy clearly states, "The Forest Service has complied with the limited part of the Forest Plan's requirement to maintain two-thirds elk hiding cover."

The EA p. A-60 (AR 1-1: 228) states that the Project will not violate the hiding cover requirements. With the implementation of Alternative 2 or 3, there would be no measurable changes in cover/ forage ratios. Assuming that the proposed vegetation treatment eliminated all cover in these two alternatives, hiding cover would be reduced to 57% and 55% respectively. However, this is a liberal estimate of the decrease in cover as the individual unit prescriptions would not reduce hiding cover to an unacceptable level. The vegetative structural diversity analysis indicates a 1% decrease in the pole, mature, and old growth structural classes. However, this analysis focused on the project area and not the entire HD 315, also generating a liberal estimate of hiding cover loss.

Thinning in Units A2, B, C, D, E1, E2, H, and I would retain a canopy cover and structure of various age classes that would still serve as hiding cover. Units A1 and G would remove more material to enhance aspen regeneration but existing aspen boles of all age classes would remain. Increasing aspen extent would provide greater availability of browse. Monitoring of browse levels by both native and domestic ungulates would occur to determine the need for physical protection of sprouts for overall successful aspen regeneration. Unit F would eliminate all merchantable material in small patches. Unit J (Alternative 3 only) would increase foraging opportunities for big game. These units would serve to provide foraging areas near security cover potentially increasing the attractiveness and suitability of these sites across the larger landscape that elk utilize.

The EA on Page A-68 (AR 1-1:149) in addressing compliance with the Gallatin Forest Plan states "Forest Plan Standard for Wildlife and Fish, page II-18, section 6.a.5 – Maintain hiding cover associated with key habitat components. Hiding cover was estimated at approximately 70-90% of the area and is not limiting. There were no areas of concern identified for big game species for this project. The vegetative structural diversity analysis indicates a 1% decrease in the pole, mature, and old growth structural classes, maintaining acceptable levels of hiding cover".

The Court Order on Page 21 states "Assuming hiding cover is at the bottom of the current estimated range at 70%, the planned 1% reduction each in pole, mature, and old growth structural classes would reduce hiding cover to 67%, thus meeting the standard. The Forest Service has complied with the limited part of the Forest Plan's requirement to maintain two-thirds elk hiding cover."

The Court Order on page 33 goes on to state “Plaintiffs’ motion for summary **judgment** is **GRANTED** with respect to Count II regarding mapping of key habitat components for elk and **DENIED** in respect to all other claims” Other claims made by the plaintiffs include compliance with elk hiding cover requirements. Because the Forest Service was found to have complied with this requirement, no additional analysis or explanation regarding hiding cover is warranted.

A Supplemental EA was prepared to address this deficiency found in the court order. Key habitat components were mapped for the analysis areas, excluding private lands as displayed on Maps 2 and 4. The analysis area for elk was defined as; “The project area is within Hunting District (HD) 315, which is basically to the west flank of the Crazy Mountains that includes all the proposed vegetation treatment units plus the remaining west side of the Crazy Mountains to the south to Rock Creek; the east flank makes up HD 580, also part of the Crazy Mountain Elk Management Unit (EMU)” (EA, p. 59). The queries themselves were based on Compartment 221, which was a more reasonable area to consider so as not to dilute the data. Also see responses to Comments 3-5 through 6-3.