# APPENDIX A

## "DRAFT" Finding of No Significant Impact (FONSI)

## BELTON FUELS REDUCTION PROJECT

Hungry Horse Ranger District
Flathead National Forest
Flathead County, Montana
August 2008

After considering the environmental effects described in the attached Environmental Assessment, and the entirety of the Project File, I have determined that these actions will not have a significant effect on the quality of the human environment considering the context and intensity of impacts (40 CFR 1508.27). Thus, an environmental impact statement will not be prepared.

_____ _____

CATHY BARBOULETOS Date
Forest Supervisor

I base my findings on the following:

***Context***

The effects of the Belton Fuels Reduction Project (Belton Project) Proposed Action would be limited in context. The treatment area is limited in size (908 acres of mechanical/hand treatments and 916 acres of prescribed burning) and activities would be limited in duration (mechanical/hand treatments should be completed within a 3-year timeframe; prescribed burning could take several years depending on burning factors like fuel moisture, weather conditions, etc.). Effects would be local in nature and are not likely to significantly affect regional or national resources.

The project is located in the wildland-urban interface (WUI) on Flathead National Forest lands adjacent to private property and structures (see Proposed Action Map - EA). The National Forest System lands in the WUI would be affected by the Proposed Action. People most affected by the Proposed Action would be residents near the project area. This action is a continuation of fuel reduction projects that have occurred for many years on the Flathead National Forest, within the

Northern Region, and across the nation without significant effects. Short-term adverse effects would be mitigated through implementation of the Standards and Guidelines in the Flathead National Forest Land and Resource Management Plan (Forest Plan), Best Management Practices, and the design features (see 'Other Details of the Proposed Action' section in the EA) developed specifically for this project.

The project design features minimize and avoid adverse impacts to the extent that such impacts would be almost undetectable and immeasurable, even at the local level. Design features include, but are not limited to, protection of riparian habitat, seasonal and operational restrictions to avoid impacts to grizzly bear habitat, protection of sensitive or threatened plants, seasonal and operational restrictions to protect the soil resource, reclamation of temporary roads, and noxious weed abatement (refer to 'Other Details of the Proposed Action' section in the EA)

Within the context of the landscape as a whole, and at the stand level, the ecological consequences were not found to be significant in either the short-term or long-term.

***Intensity***

**1. Impacts may be both beneficial and adverse. A significant effect may exist even if on balance, the effects would be beneficial.**

Both beneficial and adverse effects were taken into consideration when making this determination of significance. While there would be beneficial effects, this action does not rely on those effects to balance adverse environmental impacts. Detailed specialist reports (Wildlife, Fisheries, Botany, Hydrology, Silviculture, Soils, Fire/Fuels, Air Quality, Noxious Weeds, Access, Visuals, and Recreation; Wildlife and Botany BAs and BEs; and Flathead National Forest Evaluation and Compliance with NFMA Requirements to Provide for Diversity of Animal Communities) included in the Project File contain comprehensive effects analyses, and the finding from these resource-specific reports are incorporated by reference and summarized in the EA.

The Belton Fuels Reduction EA documents the following ***potential beneficial effects*** of implementing the proposed action:

- Increased vigor of the remaining live trees would occur due to the reduction in stand density. This would have the potential to increase the stand and individual tree's ability to withstand future insect or disease influences, especially in the mixed-species stands (EA, p. 20)
- Mortality of individual and patches of trees in the prescribed burn areas would likely result in an increase in forest structural diversity, including the variability and amount of snags and dead woody component of the forest. Because of the decreased tree density, increased vigor and growth would be expected on the remaining trees. Whitebark pine would have an opportunity to regenerate in the burned openings created in the higher elevations. (EA, p. 20)
- These treatments would allow for the successful establishment (through planting) and adequate growth of larch, Douglas-fir, western white pine, and/or ponderosa pine. These

species are desired because they are long-lived, are insect, disease, and fire resistant, and they provide wildlife habitat benefits. (EA, p. 19)

- This alternative focuses mechanical treatments on areas closest to private lands. It also strategically locates treatment areas to take advantage of adjacent existing roads and previous treatment areas. Fuels reduction treatments would effectively reduce the probability of crown fires, lower the risk of severe and intense wildfire, improve our ability to initial attack and control fires, and protect human life by providing a safer environment for firefighters. Treatments reduce the crown and surface fuels by thinning trees, and by burning, removing, or chipping fuel on the ground. (EA, p. 24)
- Thinning the trees would reduce the crown density. By removing understory trees it would also increase the canopy base height, making it more difficult for a crown fire to be initiated. The thinning would focus on removing the smaller trees and species that are less resistant to fire, leaving larger, fire-resistant species where possible. The proposed surface fuel treatment would reduce the amount of surface fuels to lower potential flame lengths. This would decrease the resistance to control and reduce the likelihood of crown fire initiation. (EA, p. 24)
- Fire behavior modeling indicates that the treatments would substantially reduce the rate of spread of fire over the existing condition to an estimated 1.5 chains per hour (3.3 chains/hour on steeper slopes), and flame length would be about 1 foot. A fire that did occur would be a surface fire, burning primarily in the surface fuels layer below the forest canopy. (EA, p. 25)
- Within the prescribed burning areas, the resulting vegetation in the timber-dominated areas should be in a more open condition with fewer ladder fuels and surface fuels. (EA, p. 25)
- It would be likely that spring food production for bears (grasses/forbs/shrubs) could increase (quantity and quality) in response to a more open forest canopy created by proposed treatments, because more sunlight would reach the forest floor. (EA, p. 39)
- The proposed treatments would change existing stands of forest cover (security/thermal cover) into more open forested conditions. This would potentially increase ungulate forage production, due to increased sunlight reaching the forest floor. In addition, the prescribed burning would be expected to increase the quality and quantity of winter browse production within treated sites. (EA, p. 41)

The Belton Fuels Reduction EA documents the following ***potential adverse effects*** of implementing the proposed action:

- Windthrow would likely increase in the treated areas, particularly within mature lodgepole pine dominated units. The susceptibility of mixed-species stands to windthrow after thinning is much less than in the dense lodgepole pine stands that have been thinned. Wherever possible (considering other resource and social concerns) treatments within the lodgepole pine dominated stands propose removal of the large majority of the trees, leaving relatively few of the overstory trees and regenerating the stand to other species. Any trees that may fall would provide the wildlife and soils related benefits associated with downed woody material. (EA, p. 20)
- Establishment of noxious weeds within treatment units would be expected because ground disturbance caused by harvest equipment (skidders, etc), log landing sites, slash

treatment methods, temporary road construction, and use of existing roads are all actions that create the potential for weed establishment and spread. (EA, p. 28)…. The noxious weed design criteria detailed previously in this EA would reduce the potential for weed establishment into the newly disturbed areas of this project. The design criteria intended to minimize soil impacts would also aid in reducing noxious weed spread. These measures would not eliminate all weed seeds from becoming established within the project area, but would reduce the potential for establishment and spread. (EA, p. 28)

- Although there would be potential for weed establishment into the prescribed burn units, the potential for establishment and spread would be low because of the cool, low to moderate intensity of the burn. (EA, p. 29)
- The proposed mechanized treatments would cause effects to soil physical characteristics. Effects would be concentrated in the skid trails, temporary roads, and landings. Reduced productivity would be caused by compaction, displacement, and rutting. (EA, p. 30)
- The total amount of nutrients on a site would likely be reduced where organic matter (i.e. woody material) would be removed. However, the plant available nutrients (those released from organic matter) would increase because sun and moisture would be increased in the treated stands. (EA, p. 31)
- Because the amount of detrimental physical soil changes would be minimized, and because organic matter in various forms would remain on the proposed units, the effects to soil microorganisms would be minor. (EA, p. 32)
- There would be little to no potential for increased stream channel erosion or sedimentation due to project activities (thinning and prescribed burning) because of the lack of any measurable increase in water quantity, the location of the units, and the character of the landforms and soils. (EA, p. 34)
- The proposed thinning/broadcast burning treatments could cause a slight short-term increase in the nutrient levels in the analysis area streams due to the leaching of nutrients from small limbs and needles left on the ground following thinning activities, and from the increased nutrients made available for leaching and/or plant uptake following the burning of biomass. (EA, p. 35)
- The implementation of this project would introduce mechanized noise into dispersed sites throughout the project area. Noise from saws and heavy equipment used for felling trees, skidding /removing merchantable trees, and possible chipping of unmerchantable material to reduce fuel loading, would have the potential to displace/disturb the use of the area by grizzly bears. (EA. p. 39)
- On the whole, berry food production would be not expected to be substantially reduced due to treatment activities. (EA, p. 39)
- Short term displacement of wolves, if they are using the area, may occur (EA, p. 41)
- Proposed treatments would reduce security cover in areas adjacent to human presence and/or private lands. It would be possible that there could be potential attraction of wolves to the thinned sites (thus increasing vulnerability to human-induced mortality), in response to increased levels of ungulate foraging. However, because the treatment sites are adjacent to private lands and homes, it seems unlikely that wolves would choose to hunt there. (EA, p. 41)
- Compacted snow during winter treatment operations could facilitate increased use by competitor carnivores. There could also be some potential for temporary displacement if

a lynx happened to be in an area during project implementation activities in response to the noise/disturbance coming from heavy equipment/chain saw use. (EA, p. 43)

- Fuel reduction treatments would likely move Unit 37 (the unit associated with potential fisher habitat) further from meeting fisher habitat needs. (EA, p. 45)
- Post-treatment condition of the units would not preclude woodpecker use, but would likely reduce the occurrence of stand-replacement fires that create important woodpecker habitat (EA, p. 45)
- Because Unit 37 (the unit associated with northern goshawk habitat) would be adjacent to, and contiguous with, large areas of similar older forest habitat conditions, it does not appear that this 16-acre reduction in potential nesting habitat would cause or contribute to any trend to federal listing. (EA, p. 45)
- Smoke from prescribed burning could cause short-term impacts on recreation and transportation in and near the project area. The size and location of a prescribed burn and weather conditions determine how much and in what direction smoke travels. (EA, p. 47)
- The many user-created trails may be impacted to some degree where they intersect proposed treatment units or temporary roads. (EA, p. 49)
- Effects to solitude from prescribed burning within the inventoried roadless area are expected to be minimal. The fires would likely be ignited by helicopter, and helicopter use would be expected to occur for about two days. (EA, p. 50)
- In the short-term, tree canopy openings created by treatments of various sizes with varying numbers of trees remaining may be visible from nearby roads and private lands. Additionally, views of stumps and reduced shrub growth may also be visible. (EA, p. 50)

Based on review of these analyses and consultation with specialists, it is my determination that through careful incorporation of specific design features (see 'Other Details of the Proposed Action' section in the EA) the Proposed Action, including mechanical/hand fuel treatments, prescribed burning treatments, slash disposal, and temporary road construction would not have a significant impact on the environments. All effects would be minimal or temporary. None were deemed irreversible or irretrievable and would not set in motion further effects. All potential direct, indirect, and cumulative effects are evaluated in the EA, specialist reports, and/or Biological Assessments (BA) and Biological Evaluations (BE).

**2. The degree to which the Proposed Action affects public health or safety.**

It is my determination that by incorporating the design features related to air quality (EA, p. 14) and traffic conditions (EA, p. 14) the Proposed Action will have no significant adverse effects on public health and safety. Dust abatement and posting signs that warn the public of activities and traffic associated with the treatments would help limit air quality concerns, and hazardous equipment and public interactions. Additionally, as designated by law, state air quality rules, and the Forest Plan, the Flathead National Forest cooperates with the State Air Quality Bureau. The U.S. Forest Service is a member of the Montana/Idaho State Airshed Group. This coordination ensures that during project implementation burning only occurs under conditions that would protect air quality and meet state and national standards (EA, p. 47)

Herbicide treatment of weeds would be conducted in full compliance with label direction and in accordance with, and under decision authority of the Flathead National Forest Noxious and

Invasive Weed Control EA and Decision Notice (USDA 2001), which the Belton Project references (EA. p. 15). These treatments would not affect public health or safety.

**3. Unique characteristics of the geographic area such as proximity to historic cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.**

The Proposed Action would not impact any known historical or cultural sites (EA, p. 51 and heritage section of the Project File). The project area does not contain park lands, prime farmlands, or ecologically critical areas.

The project area includes wetlands and riparian areas. The project design includes features to protect wetlands and riparian areas by avoiding such areas (EA, p. 16). Impacts to wetlands would be avoided during project layout and under contract provisions for project implementation. The Botany BA found that the Proposed Action would have ***no effect*** on threatened and endangered plant species.

The project area includes a congressionally designated Wild and Scenic River (Middle Fork Flathead River). The project design involves treatment prescriptions in the two units within the Wild and Scenic River corridor to blend in well with existing vegetation patterns. Additionally, design features would restrict fuel treatments to stay above the existing topographical break above the riverbank in order not to be seen by river users. (EA, p. 49)

Based on this information, I conclude that the proposed action would not have significant adverse impacts to unique characteristics of the area.

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

Based on the limited context of the project, my review of comments received during the scoping and collaboration periods of this project, and the analysis documented in the EA and Project File, I do not find any highly controversial effects to the human environment. Some comments received included a listing of references, some of which were presented as opposing science. The ID Team reviewed these comments and citations and evaluated them in terms of applicability to the Belton Fuels Reduction Project (refer to the public involvement section of the Project File).

I conclude that the Proposed Action is not considered highly controversial by professionals, specialists, and scientists from associated fields of forestry, wildlife biology, soils, fisheries, botany, and hydrology. While the proposal may be controversial, I do not believe that there is significant controversy concerning the effects of this action.

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

This project is similar to the past fuel reduction activities and thinning projects conducted in this same area and across the Flathead National Forest. Analysis of the proposed action considered the effects of these past projects as a frame of reference in conjunction with scientifically

accepted analytical techniques, available information, and best professional experience and judgment to estimate effects to the human environment. It is my conclusion that there are no uncertain or unique characteristics in the project area which have not been previously encountered or that would constitute an unknown risk to the human environment.

**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.**

The Belton Fuels Reduction Project is a site-specific project that would not set precedence for future actions nor would it present a decision in principle about future considerations. Any proposed future project must be evaluated on its own merits and effects. The Proposed Action is compatible with the Forest Plan and the capabilities of the land. I believe this action would not represent a decision in principle about a future consideration.

**7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.**

Connected, cumulative, and similar actions have been considered and included in the scope of the analysis. The analysis accounts for past, present, and reasonably foreseeable Forest Service, State, and private landowner actions within the project area.

For the following resources the proposed action may contribute to effects from past, present, and reasonably foreseeable actions but the cumulative effects would not be significant:

- Many past, present, and foreseeable actions have and would contribute to weed risk and spread in the project area (see discussion under the No-Action Alternative). Additional acres, outside and adjacent to the treatment units, would become more susceptible to weed invasion. This contribution to cumulative effects would be moderated, however, by the design criteria that would reduce the potential for new weed introduction and spread into existing un-infested areas; specifically weed treatments, soil stabilization measures, revegetation of disturbed sites, and restoration of constructed temporary roads. (EA, p. 29)
- The cumulative disturbance of past activities combined with the proposed activities was determined for each treatment area. The Proposed Action was specifically designed to reduce the amount of detrimental soil disturbance, and all units would meet the soil quality standards after implementation. (EA, p. 32)
- Past, present, and foreseeable future actions (including the Proposed Action) would not cause a measurable increase to water yield, sediment yield, and/or nutrient levels outside the natural range of variation for the streams in the analysis watersheds. (EA, p. 36)
- The Coram Lake Five subunit only has a small amount of security core habitat, and during project implementation there may be unintended displacement effects on grizzly bears using the area. However, because the subunit has an area closure to motorized access on Forest Service lands (except on existing open roads), and because project

activities would not occur in the spring (April 1 – June 30), the project is not expected to adversely cumulatively affect grizzly bears or their habitat. (EA, p. 39)

- The project and cumulative effects areas are dominated by closed-canopied forests containing adequate wolf security cover (on National Forest System lands). Other past forest treatment of vegetation (on private and National Forest System lands) has generally provided a net-positive benefit for ungulates because they have produced open forest conditions favorable to the growth of grass, forbs, and shrubs (ungulate forage). Past road construction and maintenance of roads in the subunit had the effect of allowing humans relatively easy access into the area, during the hunting season this may have had the effect of reducing local ungulate populations. Motorized access restrictions imposed in this subunit have stabilized the level of habitat security for local ungulates. Because of these reasons, gray wolf habitat on National Forest System lands would still be viable and available and it is concluded that the proposed project activities would not cumulatively adversely affect gray wolves or their habitat (EA, p. 41)
- There would be no adverse cumulative effect to lynx habitat security. Ongoing actions, such as recreational activities and forest products gathering, are unlikely to produce cumulative effects to lynx because of the relatively low level of these activities. (EA, p. 43)
- The cumulative impacts of all private and agency burning are assessed daily during the burning season through the coordination of the Montana/Idaho Air Quality Bureau. This group considers other sources of smoke such as wildfires, wildland fire use events and industrial sources. Prescribed burning in the Belton Project area would need to be approved on a daily basis through the Montana/Idaho Air Quality Bureau. Based on current and forecasted weather, burns are approved or disapproved based on their cumulative impact on the airshed. This regulatory mechanism helps ensure that the cumulative effects of prescribed burning do not lead to a violation of air quality standards. (EA, p. 47)

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

Heritage/cultural surveys were completed for the Belton Project area, and no previously undiscovered sites within the project area boundaries were found (EA, p. 51 and heritage section of the Project File). Additionally, the Confederated Salish and Kootenai Tribes were contacted in July 2007 and they did not express concerns for the project (refer to the heritage section in the Project File). In the event cultural or heritage resources were discovered during project implementation, they would be evaluated and protected (EA, p. 15). I believe that this action would not have a significant effect on 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.**

No threatened or endangered species or its habitat would be adversely affected by the implementation of the project. The project would have no effect to bull trout (EA, p. 37), water

howellia (EA, p. 26), or Spalding's catchfly (EA, p. 26). The project may affect, but it is not likely to adversely affect grizzly bear (EA, p. 38), gray wolf (EA, p. 40), and Canada lynx (EA, p. 43). Biological assessments were completed for the project and can be referenced in the Project File.

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

The Proposed Action meets federal, state, and local state laws for noxious weeds (EA, p. 29), soils (EA, p. 32), water quality (EA, p. 36), fisheries (EA, p. 37), threatened and endangered species (EA, p. 39, 42, and 43), air quality (EA, page 47), and heritage/cultural resources (EA, p. 52). It also meets National Environmental Policy Act disclosure requirements.

The proposed action is consistent with the National Forest Management Act, the Flathead National Forest Land and Resource Management Plan, and the Endangered Species Act, as well as other applicable Federal, State, or local laws or requirements imposed for the protection of the environment.