

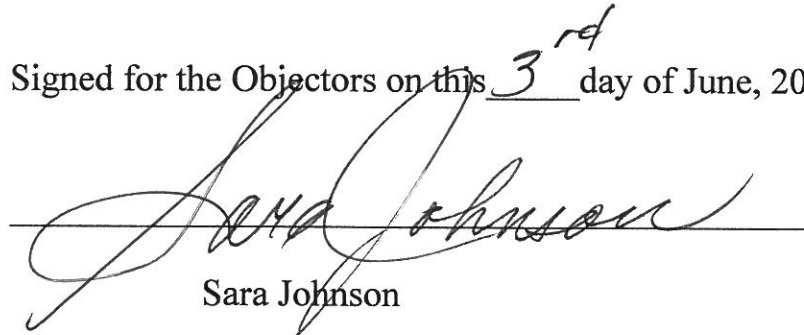
# **Objection against the Threemile Restoration and Resiliency Project**

## **1. Objectors names and address:**

Lead Objector Sara Johnson, Director, Native Ecosystems Council;  
PO Box 125, Willow Creek, MT 59760; phone 406-579-3286.

Objector Tom Carroll, Box 4, Rodeo, N.M. 88056; phone 406-880-4887

Signed for the Objectors on this 3<sup>rd</sup> day of June, 2019



Sara Johnson

## **2. Name of the proposed project:**

Threemile Restoration and Resiliency Project

## **3. Responsible Official**

Forest Supervisor Mary Erickson, Custer – Gallatin National Forest Supervisor; Ron Hecker, Ashland Ranger District Ranger, Custer – Gallatin National Forest

## **4. District where the project will be implemented:**

Ashland Ranger District of the Custer – Gallatin National Forest

## **5. Connection between specific written comments on the particular proposed project or activity and the content of the objection:**

Native Ecosystems Council provided scoping comments on the Threemile Forest Restoration and Resiliency Project (hereafter “Threemile Project”) on

November 2, 2017. NEC provided comments on the Environmental Assessment (EA) on November 26, 2018. We raised 13 specific concerns in our comments on the EA, including:

1. The overall impact of fires on forest habitat in the project area is never disclosed.

This concern was not addressed in the final EA and proposed action. There is almost no information on how fires have impacted this landscape, except for forest cover. It is not clear how much sagebrush habitat has burned in these fires, or juniper habitats, both habitats that are important to wildlife. As a result, there is no connection ever made between the amount of fuels that have been reduced due to thousands of acres of wild fires in this landscape, and the need for additional fuels reduction. We have carried this concern forward into our objection.

2. There is no analysis including mapping, of past recent projects in the Threemile Project Area.

This concern was never addressed in the final EA, and is being carried forward into our objection. We have a huge question as to how many of the treatments that were identified in the 2002 Record of Decision for the Threemile Stewardship Project have been implemented, and what the monitoring results have shown. There were thousands of acres of treatments planned, treatments that may have already significantly altered the character of this landscape due to agency management actions. Again, there was no connection ever made between past and planned treatments in regards to cumulative impacts and the current purpose of this project.

3. The notice for release of the EA did not include all the proposed treatments, which are basically for range management; the inclusion of prescribed burning for range management in this project was never clearly identified to the public.

The proposed draft decision and EA still did not provide any definitive maps of the proposed treatment areas. The maps are at such a large scale that they are extremely difficult to decipher. This is a NEPA violation as to a failure to provide a reasonable level of detail to the public so they can have a good understanding of the project. We are carrying this issue forward into our objection.

4. The purpose of the logging is to promote the new sawmill in Ashland, but the purpose of burning up ponderosa pine forests is a jobs program for the Forest Service.

Since we raised this concern, we have learned that the agency is misleading the public (a NEPA violation) by claiming that the wood products will be sold to the Ashland mill, when in fact these products are going to a mill in Huelett, Wyoming. In regards to burning up ponderosa pine forests to reduce fuels, we are greatly expanding on this concern in our objection, since the Custer Forest Plan does not direct that viable populations of wildlife can be eliminated on the forest in order that massive fuels reduction projects can be completed, with wildlife habitat being identified solely as “fuels.”

5. There is no valid old growth management strategy for this landscape.

This issue was ignored in the final EA and draft decision. There remains no old growth management strategy for this landscape. This concern was carried forward into our objection.

6. There is no valid management of the goshawk in this landscape, which is a significant adverse impact if it is eliminated due to agency management actions.

NEC was able to review the Wildlife Report along with the final EA, and as a result, found no supporting evidence that this project will maintain the current active goshawk territory in the Threemile drainage, due to a lack of management for forage habitat. The NEPA analysis also failed to define what the trend for goshawk active territories is on the District, or on the Custer. This lack of analysis means that the likely demise of this active goshawk territory is not being disclosed to the public. Also due to a lack of analysis, including from the extensive fires that have occurred in goshawk habitat on the Custer, the cumulative loss of goshawk territories is likely significant, a problem that will be exacerbated by the proposed Threemile Project. We are carrying this concern forward into our objection.

7. The EA does not define what the level of big game habitat effectiveness currently is, or what it would be during project implementation.

The EA has addressed this concern in regards to habitat effectiveness, with high quality maps. We are not carrying this issue forward into our objection.

8. The objective of maintaining elk security in the project area will not be met, but the significance of this impact is never analyzed for the public.

The agency continues to claim that the project will meet recommendations for elks security following implementation of road closures upon project completion. However, the agency is using an invalid definition of elk security, which means that the conclusions provided in the analysis are also invalid. We are carrying this concern forward into our objection, along with expanding this issue to the end result, which is displacement of elk from public lands during the fall hunting season, which contributes to the overpopulation problems of many Montana elk herds.

9. The long-range management strategy for sensitive species, such as Montana Species of Concern, is never identified in the EA; the direct conflicts with management of many of these species with the agency's fuels management strategy is therefore never disclosed to the public, as is required by the NEPA.

There was basically no analysis of how the project will impact a host of sensitive species based on their habitat needs. We are carrying this concern forward into our objection.

10. The snag management strategy is scientifically outdated and will not maintain populations of associated species, including birds and bats.

The EA noted that the Northern Region Snag Management Protocol will be applied to the project area. However, this Protocol is invalid because it does not require that snags be provided in forest stands where they are required by almost all cavity-nesting birds, as well as bats. In addition, the EA simply states that 2 large snags per acre will be retained, trees over 10 inches dbh (EA at 23). However, if some cavity-nesting birds and bats require relatively undisturbed forest stands as habitat, maintaining snags in harvest units will not meet their habitat needs. So it is clear that the proposed snag management strategy is nothing more than window dressing. In addition, it is not even clear what the current levels of larger snags are in

proposed harvest units. What if these levels are not currently available? Does that mean that significant impacts already exist? One of the best snag management strategies is to maintain large quantities of old growth forest, yet there are no older forest stands in the entire project area slated for management of old growth and thus higher densities of snags in undisturbed forests. This issue is being carried forward into our objection.

As a part of this issue, we are adding concerns about management for the threatened Northern Long-eared Bat, who uses snags for hibernacula, nurseries, and general roosting habitat. Since there are no definitive plans for any actual level of snag habitat in the project area, the project will clearly be a violation of the Endangered Species Act (ESA).

11. The management of bird species that required relatively dense, older forests was not ever identified or evaluated in the EA.

As we noted previously, there are many bird species in Montana that require relatively undisturbed, older dense forest stands as habitat. There is no analysis in the Threemile Project EA or Wildlife Report as to how this suite of species is being maintained at viable levels in this project area. We are carrying this concern forward into our objection.

12. The fuels management strategy for the proposed project is outside the current Forest Plan for the Custer portion of the Custer – Gallatin National Forest.

The agency has yet to demonstrate that fuels management is the top priority for resource management, a priority higher than maintaining viable populations of wildlife, on the Custer. This is never identified in the Custer Forest Plan. The proposed project will have devastating impacts on almost all wildlife species that could occur in the project area, in order to promote fuels management. This is a National Forest Management Act (NFMA) violation as it violates the Forest Plan requirement to maintain viable populations of wildlife species.

13. The Threemile Project will have significant direct, indirect and cumulative impacts on almost all wildlife species that could inhabit this project area, an impact that requires completion of an environmental impact statement (EIS).

It appears that this project will reduce hiding cover in the project area to only about 5%. The impacts of past treatments on hiding cover is unknown. The resulting levels of hiding cover will create significant adverse impacts on all big game species, especially mule deer for general and winter habitat needs, and security for elk. Also, the impacts of past and planned treatments on 2 highly valuable habitats for wildlife, including juniper and sagebrush, is never addressed in the EA or Wildlife Report. However, it appears that sagebrush has been significantly reduced in the project area, and juniper appears to have been targeted for treatment over the years. There is little doubt that the direct, indirect and cumulative impacts on the proposed Threemile Project will have or exacerbate significant adverse impacts to a host of wildlife species, including the threatened Northern Long-eared bat. This project clearly requires an EIS in which all adverse impacts to wildlife are fully disclosed and evaluated as per the current best science.

## **6. Remedies and Inclusions:**

It is clear this project will have significant direct, indirect and cumulative adverse impacts on almost all wildlife species in the Threemile Project Area. Thus a decision to implement the various fuels treatments and rangeland improvements via prescribed burning requires completion of an EIS. This EIS needs to provide correct public information as well, that the past and planned prescribed burning is being done to increase forage for livestock, and that the timber that is to be sold will go to a mill in Wyoming.

This objection includes 5 appendices, including Appendix A with 11 colored photos relevant to the project. Appendix B contains relevant portions of agency documents cited in the objection. Appendix C contains comments by Objector Tom Carroll on wildlife in the project area. Appendix D contains relevant portions of literature and/or reports cited in the objection in regards to management of big game species. Appendix E contains relevant portions of literature and/or reports cited in the objection in regards to nongame management.

**8. A description of those aspects of the proposed project addressed by the objection, including specific issue related to the proposed project if applicable, how the objectors believe the environmental analysis or draft decision specifically violates law, regulation, or policy:**

**A. The agency will violate the NEPA, NFMA, APA and the ESA.**

**1. The agency is creating significant habitat losses to mule deer which are in turn significantly impacting the mule deer carrying capacity in the project area.**

The Ashland Ranger Districts provides habitat for big game species, including antelope, elk, mule deer and white-tailed deer. Mule deer are identified as a major interest (Key) species in the Custer Forest Plan (Project Wildlife Report at 27). Based on the importance of deer on the district, the Ashland Ranger District developed management guidelines for mule and white-tailed in 1990 (USDA 1990). These guidelines were signed of by the Montana Fish, Wildlife and Parks. At that time, mule deer were the most widespread big game species on the district. These guidelines at page 1 noted that the District provides habitat for the most stable and important population of mule deer in southeastern Montana, and for a growing white-tailed deer herd. It was also noted that hunting for mule and white-tailed deer generates the major recreational use of the District. This importance that hunting is one of the primary recreational activities on the District is also noted in the Project Wildlife Report at 28.

The 1990 District deer management guidelines at page 3 described the habitat on the District, including the Threemile area. It lies in the Missouri Plateau section of the Great Plans Province; this area is characterized as an upland plain interrupted by tablelands, drainageways, streams and rivers; common landscape features include badlands, sculptured sandstones, shale escarpments, and scoria buttes with highly irregular topography; ponderosa pine is the only forest trees on the District; the driest types have open stands of short trees and grassland understory vegetation; mesic north-facing slopes have dense stands of taller pine trees with a luxuriant shrub and forb understory. The Threemile Stewardship EIS at 3-17 states that the dry ponderosa pine stands on south slopes have a canopy cover of 25%.

Forest habitat is rather limited in this landscape, and dense forest habitat is even more limited. This EIS at 3-57 noted that the project area contains a mature forested cover that is by nature of the topography, highly fragmented by grasslands. Appendix A of this objection includes three colored photos of cover distribution in this Threemile landscape. The first photo was taken

from the 2002 Threemile Stewardship EIS, Appendix G. This aerial photo of the southwest portion of the project clearly demonstrates the very patchy nature of forested habitat in this landscape. The other 2 photos were also taken from the Threemile Stewardship EIS, Appendix G; these two landscape photos show the relatively spotty, open character of forests in the southeast portion of the project area.

As was recently reported by Coe et al. (2018) mule deer populations have experience widespread declines in much of western North American and alteration and loss of habitat could be contributing to these declines. The Threemile Restoration and Resiliency Project (hereafter “Threemile Project”) EA and Wildlife Report do not provide any specific information on mule deer population trends in the project area or District, other than to claim that big game populations are increasing (EA 31). Without any specific population trend data, the impacts of the proposed degradation/removal of mule deer habitat can not be accurately identified.

**a. Project impacts on mule deer winter habitat are never disclosed, including direct or cumulative impacts from past actions and wild fires.**

There is no specific analysis in the Threemile Project NEPA documents that evaluate past and planned activities on the mule deer. This lack of analysis includes the past and planned impacts on mule deer critical winter range that is in the project area. This critical mule deer winter range was mapped in the 1990 deer guidelines, Appendix C, but not mapped in the Threemile Project EA or wildlife report. This map is provided in Appendix B of this objection. This map demonstrates that many, if not all of the proposed project logging and burning treatments in the southwestern portion of the project area overlay critical mule deer winter range. This can be noted from Figure 4 in the Threemile EA at page 51, that shows the location of most of the proposed treatment units. The southwest portion of the project area where the critical mule deer winter range was identified in the 1990 deer guidelines will be severely impacted by the project. The Threemile Project NEPA analysis, including the wildlife report, fail to identify or evaluate management impacts to this critical winter range, which means the impacts, both past and planned, on this key species are unknown.

There are a number of severe adverse impacts that agency management activities can have on mule deer winter range. One is the loss of winter thermal cover. Page 4 of the 1990 guidelines notes that dense thickets of

juniper and ponderosa pine are a very important component for mule deer during the winter. The recommendations at page 1 also note that thermal cover for deer can include two-storied stands. This requires protection of the understory trees/saplings, which in the Threemile project area identified as “fuels” and are slated for expansive removal.

Page 7 of the 1990 District deer guidelines defines thermal cover are areas of at least 20 acres in the sapling-pole stage or older, with canopy closures of 70% or greater. The literature review section of these guidelines, however, defines deer thermal summer cover as deciduous-coniferous stands at least 5 feet tall with a 75% crown closure, or coniferous stands at least pole size or larger with 60% or more crown closure; winter thermal cover was defined as the same except that it would not include deciduous cover due to the loss of leaves in the winter. These definitions were based on Black et al. (1976) and Thomas et al. (1979). Both definitions, however, require that winter thermal cover for mule deer contains dense coniferous forest stands with a high canopy closure. Management of critical winter range by subcompartments in the 1990 guidelines in the literature review section states that the optimum ratio of cover to forage on mule deer summer and fall ranges includes a total of 40% cover, with a minimum of at least 10% of this cover being thermal cover; however, on winter ranges, the discretionary balance should be allocated to thermal cover, which would result in 30% thermal cover on winter ranges.

The 1990 deer guidelines address the importance of dense conifer stands to wintering mule deer, based on published research (literature review page 2). These studies, as well as Pac et al. (1991) identified the value of thermal cover to mule deer in the winter to moderate severe weather conditions as well as snow depths. The importance of thermal cover to deer, particularly dense forest stands, is related to protection from weather extremes in the winter.

Since the Threemile Project is targeting dense conifer stands for thinning, as well as targeting all dense understories that would also contribute to, or provide thermal cover, there is a direct conflict between project objectives and management of critical mule deer winter range. The 1990 guidelines at page 9 note that critical deer winter range will be managed predominately for deer habitat. These guidelines also state that on critical deer winter range, there will be no timber management activities between December 15 and April 15.

The Threemile Project EA as well as the Wildlife Report also were completely silent on past impacts of juniper and sagebrush removal activities on mule deer winter range. Past research has clearly identified the importance of juniper species to mule deer. In 1958, Lovaas (Table 3 at 279) reported that in the Little Belt Mountains of Montana, several juniper species were the most heavily used forage resource by mule deer in the winter, but were also used quite heavily in the spring. Pac et al. (1991) later reported that juniper were an important forage and cover resource for mule deer in the winter in the Bridger Mountains of the Gallatin National Forest (e.g, pages 76, 7991, 92 (Table 5.9). Most recently, Frey (2018) reported on a mule deer study in Oregon, where it was found that research results called into question juniper removal projects due to the importance of juniper to mule deer winter range. This study was published in the Journal of Wildlife Management by Coe and others (2018).

It is clear that juniper has been targeted for slashing and burning in this project area. For example, the Threemile Stewardship EIS noted in the Record of Decision (ROD) at page 2 that 1,292 acres of juniper would be removed, along with joint removal of both juniper and sagebrush on 17,204 acres. Appendix C of the Threemile Stewardship EIS includes a table classifying all habitats in the project area. The acreage of juniper is identified as 1194 acres. So almost all juniper habitats (92%) were targeted for removal. It is not clear how many acres of juniper were subsequently removed via this ROD. There is no information ever provided in the Threemile Project EA or Wildlife Report as to how many acres of juniper have been destroyed with prescribed burning and slashing. The Threemile Project EA at 32 notes that between 2009-2011, there were 4,270 acres of understory slashing, mostly along roads; it is not clear how many acres of juniper this may have included. The EA at page 32 also notes that there have been 2,334 acres of prescribed burning from 2012-2012. It is unknown how many acres of juniper this included. And also the EA at 32 notes that there were 3,458 acres of hazardous fuel removal since 2009. Thus it is possible that much of the current juniper habitat has already been removed. This loss would also include the 22,576 acres of wild fires that have occurred, although it is not clear if all these acres were in the project area (EA 32). Thus, the cumulative impacts on juniper habitat so important to mule deer wintering areas is unknown, but likely significant. Yet without any analysis of either the importance of juniper to mule deer, or the cumulative loss in the

project area, the additional losses of juniper trees that will occur with the proposed treatments is unknown as it was never disclosed.

Page 4 of the 1990 guidelines also notes that sagebrush is one of the most important winter forage resources for mule deer. It appears that most sagebrush in this project area has been eliminated by prescribed fire and/or wildfire. The Threemile Stewardship EIS at 3-68 identified 6,778 acres of forest service lands mapped as sagebrush in 1976; at that time, there was also a sage grouse lek in the project area in 1980. This EIS at 3-17 noted that there are about 1,991 acres of upland prairie sagebrush in the project area. There is no information in the Threemile EA or Wildlife Report in regards to current and historic levels of sagebrush habitat in the project area. The Home Creek Rangeland Project EA at page 39 notes that sage grouse no longer occur in this landscape since 2004. Given that sage grouse no longer occur in the project area, and there has been ongoing prescribed burning for range improvement, this appears to be an indicator that treatments to burn sagebrush have had significant adverse impacts on sage grouse, and potentially other species as mule deer. A photo in this EA at page 29 shows that sagebrush occurs across the landscape pictured in the photo.

**2. The failure of the agency to manage for minimum habitat requirements for mule deer on spring/summer/fall range will result in significant adverse impacts on this key species without the completion of an EIS.**

The 1990 deer guidelines developed by the Ashland Ranger District (USDA 1990) include management recommendations for mule deer summer range. Page 7 of these recommendations include: deer summer thermal cover stands will be a minimum of 10% of the analysis area (this is defined as a timber subcompartment); thermal cover stands should be at least 20 acres in the sapling-pole stage or older, with canopy closures of 70% or greater; stands on north-facing slopes should receive priority as summer thermal cover, but thermal cover would not be limited to such stands. Page 8 of these guidelines defined “optimum” thermal cover as a stand of 40 or more acres, and optimum hiding cover as a stand of 25 acres.

These guidelines also recommend that deer cover requirements should be increased when landscape cover is low. The Threemile Project area has a “claimed” level of 37% cover (e.g., Wildlife Report 30-31). According to the

1990 deer guidelines at page 7, at least 60% of the forested area should be in cover. An important focus of these guidelines (page 8) is to limit disturbance to mule deer by keeping the activity perimeters within one analysis unit (a timber subcompartment) at a time.

The 1990 deer guidelines in the literature review on deer habitat components states that the optimum ratio of cover to foraging areas has been recommended as 40% to 60% for deer and elk (Black et al. 1976, Thomas et al. 1979); on summer and spring-fall range Thomas et al. (1979) recommended that 40% cover be divided as 20% hiding, 10% thermal, 5% fawning, and 5% hiding, fawning and thermal cover; optimum cover would be composed of 20-30% hiding and 10-20% thermal. The 1990 deer guidelines at 6 recommend that a cover forage ratio of 40:60 will be used as a general goal to work towards for overall deer habitat.....cover of a specific type will be maintained along roads for escape/security....manage cover areas to provide a minimum of 50% crown cover at least 600 feet in width; each analysis area (timber subcompartment) will provide for a minimum of 40% total cover with at least 10% thermal cover and 10% hiding cover.

The 1990 deer guidelines define hiding cover by the standard definition by Thomas et al. (1979) and Black et al. (1976) as vegetation capable of hiding 90% of an elk from the view of a person at 200 feet or less; if elk hiding cover requirements are met, they will be exceeded for deer, as deer are much smaller. Fawning cover is defined as areas of 1-5 acres in size, with an approximate 50% crown cover containing low shrubs or small trees from 2-6 feet tall. The 1990 guidelines define hiding cover in the same manner as was defined in the 2002 Threemile Stewardship EIS; the glossary of this EIS at page 11 defines hiding cover as vegetation capable of hiding 90% of an adult elk or deer from human's view at a distance of 200 feet or less.

The 1990 deer guidelines included a summary of habitat in three Coal Bank Creek mule deer home ranges in timber compartment 436 (subcompartments 2 and 3). AS per the compartment map provided in this document, timber compartment lies somewhat southwest of the Threemile Project Area. The home ranges of the 3 mule deer does averaged about 160 acres. From that data, it was assumed that an optimum mule deer doe summer home range will be 160 acres composed of 41.1% ponderosa pine with 70% crown cover; 15% ponderosa pine with 40-69% crown cover; 17.2% ponderosa pine with 10-39% crown cover, 8% riparian/hardwood draws, and 18.7% non-timbered and logged areas with less than 10% crown cover; this is a 70:30

cover forage ratio; it is assumed that mule deer does on these home ranges are more productive. This measured level of mule deer cover in a home range is very similar to what is defined as “good cover” of 66% or greater in the 1985 Montana Cooperative Elk-Logging Study (Lyon et al. 195) at page 9.

The current claimed level of hiding cover in the Threemile Project Area is 12,119 acres of forest cover (Wildlife Report at 30-31), which would provide a landscape cover level of 37% (e.g., EA at 5). However, this is most likely a significant overstatement, due to a number of factors. First, all of the forested habitats are being classified as cover, except the 827 acres that burned and have never regenerated. The inclusion of every regenerated forest stand in the project area as hiding cover seems unlikely. The Wildlife Report at 31 identifies 32,833 acres of habitat in the project area; 1939 acres is identified as spring/summer/fall hiding cover, and 2944 is identified as winter cover. This equates to 4883 acres of hiding cover in the project area. This is remarkably close to 40% of the forested acres that are noted to have a canopy closure of 40% or greater (EA 5), or 4855 acres (40% times 12,137 acres of forest). So this information at 31 of the Wildlife Report is clearly measuring hiding cover by forest stands with a canopy cover of 40% or greater. What is not clear is why another 7236 acres are identified as “other cover” in spring/summer/fall and winter ranges. There is no information ever provided as to where these other cover areas were derived or measured. In fact, this table demonstrates that the project area contains only 15% hiding cover, not 37% hiding cover (4855 acres of cover within the 32,924 acre project area<sup>0</sup>). This misrepresentation of current hiding cover levels then leads to a false representation of project impacts on hiding cover. If there are only 4855 acres of current hiding cover, and 3,160 acres will be removed, this means that post-project there will be only 1695 acres of hiding cover, which is 5% of the landscape (4855 acres of cover minus 3,160 acres of logging = 1695 acres of hiding cover remaining). Reducing hiding cover to only 5% of the landscape will be a severe impact on mule deer, which requires completion of an EIS.

The Wildlife Report at 69 provides a photo of what is defined as “viable” hiding cover. This is a dense sapling stand of conifers, not a forest stand with a 40% minimum canopy closure. Mitigation along roads is proposed with “viable” hiding cover for 75 feet. This clearly means that a 40% canopy cover definition of cover could not apply to this mitigation measure, as 75 feet of an open forest would not provide screening from vehicles and noise.

Actually, the impact of the proposed treatments on hiding cover will be more severe than just the logging of 3,160 acres. The prescribed burning of ponderosa pine forest without any logging will create openings up to and over 2 acres in the stand (EA 21). And the canopy of these stands will also be reduced. Table 7 at EA 22 notes that there is an expected level of up to 20% mortality of trees over 9 inches dbh in burned ponderosa pine stands with 5% of the stand having canopy openings.

Our claim that the current level of hiding cover in the Threemile Project Area is overestimated is supported by information previously provided in the Threemile Stewardship EIS; this EIS at page 3-79 notes that only a portion of the forest actually provides hiding cover.

*-the project EA at 5 notes that only 40% of the forest stands in the project area have a canopy cover over 40%, which is the definition of hiding cover used in the EA; this would mean that only 4855 acres of the total forested acres is providing canopy hiding cover (40% of 12,119 acres of forest). This equates to 15% of the total forested acres that meet the minimum canopy cover of 40%, or 4855 acres. Using this definition of hiding cover, 4855 acres within the 32,924-acre project area would provide a hiding cover level of only 15%.*

*-the claim that a 40% canopy cover provides the same level of hiding cover as the standard horizontal cover definition (Black et al. (1976) has never been verified via peer review by the Forest Service research branch or otherwise; the revised definition of hiding cover was based on an unpublished white paper from a Gallatin National Forest biologist (Canfield 2011); a comparison of the 2 different types of hiding cover, a 40% canopy cover and dense horizontal vegetation, is provided in Appendix A of this objection; a photo of a goshawk nesting stand shows the appearance of a forest stand without any understory required for the standard definition of hiding cover; the actual canopy cover is unknown, but likely is at least 40%. Another photo taken from page 69 of the Threemile EA shows a typical example of horizontal hiding cover as per the standard definition; It is clear that the quality of hiding cover provided by these two different definitions is significantly different for screening big game species; thus the use of the 40% canopy cover definition for big game means that the overall level of hiding cover is going to be lower than provided by the standard published definition.*

*-the 40% canopy hiding cover criteria used for the Threemile Project, although unverified through peer review, actually includes just tree stems as hiding cover, even though there is no canopy; the Wildlife Report at 28 states that burned forest areas can still provide hiding cover as long as the tree stems remain standing.*

*-the revised definition of hiding cover will not only change how hiding cover is currently being measured, but will change how cover is being measured following vegetation treatments; prescribed burning, slashing, and fuels treatments that remove understory hiding cover will not be identified as a loss of cover because the canopy is not being impacted, when in fact horizontal hiding cover is being removed; as well, if logging thins the overstory but a 40% canopy remains, then this treatment will be shown to maintain hiding cover; this thinning treatment followed by complete removal of the understory via slashing and burning would also still supposedly retain hiding cover; thus past activities that included burning and other fuels treatments that would have actually reduced hiding cover would not have been included in the 37% estimate of hiding cover.*

*-The hiding cover estimate of 37% in the Threemile Project Area did not include any information on past activities in the project area that would have affected hiding cover; the Threemile EA at 32 identifies a number of activities that have occurred in this landscape; these include understory slashing from 2009-2011 on 4,270 acres, precommercial thinning on 471 acres, and hazardous fuel treatments on 3,458 acres since 2009; prescribed burning has included 5068 acres; and the Home Creek Rangeland Project EA (part of the Threemile Project Area) at page 28 notes that 4,955 acres of forest burned in the fires of 2000 and 2006. It is possible that the 471 acres of precommercial thinning reported at page 32 of the Threemile EA includes regeneration on these acres.*

*-The hiding cover analysis in the Threemile Project EA or Wildlife Report did not include any information on long-term effects of past wild fires in the project area; the Wildlife Report did note at page 28 that lots of hiding cover has been lost due to fires; it is not clear how the extensive past fires have affected hiding cover, other than 827 acres of these burned areas have never regenerated, and are being planted. The 2002 Threemile Stewardship EIS at page 3-2 stated that the Tobin fire burned 9,265 acres of the project area; there have been numerous fires in the project area as demonstrated on the project area fire history map; the impact of these many fires on hiding cover is never clearly defined in the Threemile Project EA or Wildlife Report; Appendix A of our objection provides 2 examples of burned forest habitat, one that was not treated, and a second that was treated after*

*the initial forest fire; the Home Creek Rangeland Project EA at page 28 has a photo of burned forest habitat in the project area; this photo demonstrates that the patchy forest cover is largely removed; the management of these burned areas post-fire is also a cumulative effect on hiding cover, as is demonstrated in Figure 3 of the Threemile EA at page 46; this photo shows a forest stand that has been logged and burned by a management treatment; this management is clearly preventing any hiding cover to reestablish in this unit.*

**3. The failure of the agency to evaluate the impact of the proposed project on elk displacement from public to private lands is a violation of the NEPA; this is a well-recognized problem that already has significant impacts on elk habitat use on public lands in the fall hunting season; actions that exacerbate this problem clearly require an EIS.**

Elk is a key species of interest, and a major interest species for the Custer National Forest (Wildlife Report at 10, 27). The project Wildlife Report noted at page 28 that the Ashland Ranger District is the single large block of public hunting in eastern Montana, and that hunting is one of the primary recreation activities on the District. In 2014, the Bozeman Daily Chronicle had an article regarding the current problem of high elk numbers in many areas of Montana because elk move to private lands in the hunting season and are protected from most harvest by the general public. Many areas are over elk population objectives, including the Threemile Project area landscape. And in 2015, the Montana Outdoors published an article on this overpopulation issue. Dickson (2015) reported that elk populations have grown too high in 80 of Montana's 138 management areas that have population objectives. This is 58% of the management areas. It was noted that getting these populations to objectives is a top priority for the MFWP. Yet there is no analysis in the Threemile EA or Wildlife Report that addresses this significant issue. The analysis for this project is a clear violation of the NEPA as the severe impacts of reducing the current level of at best 37% hiding cover down to only 5% was never identified or addressed in regards to elk displacement from public lands. Since the entire District contains on average only 28% hiding cover (Wildlife Report at 30), there are limited opportunities for elk to find other areas with greater hiding cover than the Threemile Project Area after cover is severely reduced to 5%. The agency claims that the Threemile Project Area contains some of the highest levels of hiding cover on the District, at 37% (Wildlife Report at 30). So reducing this barely suitable habitat as per cover down to the same level of

insufficient habitat that exists across the rest of the District clearly will exacerbate the displacement issue. The Cooperative Elk-Logging Study (Lyon et al. 1985 at 9) defined “good cover” as 66% of the total landscape. This would be 61% higher than the hiding cover level being proposed for the Threemile Project Area.

In addition to failing to identify and evaluate the current Montana issue of elk displacement to private lands due to a lack of security, the Threemile Project NEPA analysis misrepresents the impacts of the project on elk security. The Wildlife Report at 30 shows that 36% of the project area is comprised of elk security. This supposedly shows that the recommended minimum 30% security as per Hillis et al (1991) is currently being met in this landscape. However, since only 37% of the project area (is actually likely only 15%), is hiding cover, actual security levels for elk could not be 36%. This misrepresentation of security habitat was derived by using an invalid definition of elk security. Hillis et al. (1991) clearly define elk security as nonlinear blocks of hiding cover that are over 0.5 miles from an open road during the hunting season. This definition of security was based largely in a research project by Lyon and Canfield (1991) that found that elk consistently select a conformation of habitats that provides access to the larger, continuous forest communities of the environment. In the management implications reported in this study, they stated that retention and creation of large, connected blocks of homogeneous canopy structure should become a primary goal in elk habitat management for security.

The agency has clearly misrepresented what constitutes elk security, and as a result, has misrepresented the impacts of the proposed action on this key habitat feature for elk.

There is no identified impact caused by the removal of hiding cover from logging. The Wildlife Report at 30 shows that the temporary reduction in security during logging is due entirely to additional roads; once these roads have been closed, the level of security will increase from the existing level of 36% to 38%, in spite of the loss of at least 3,160 acres of hiding cover from logging. This is an impossible result, in violation of the NEPA and the APA. This result is obtained by the agency’s modification of the published definition of hiding cover to one that does not require any hiding cover (Wildlife Report at 30). The definition of hiding cover for the Threemile project is at least 250 acres that are 0.5 miles from open roads; these acres

can have no cover; thus a clearcut can qualify as security for elk in the hunting season.

At the same time the agency claims that hiding cover is not needed for big game security, the Wildlife Report at 32 notes that the expanded size of individual units reduces the amount of green tree cover between units; this could reduce the movement of game across the project area and between areas of high cover or security by reducing the utility of small scale corridors. The Wildlife Report also notes at 33 that cover is available throughout the district and can provide for big game until cover is replaced within 10-40 years.

Contrary to the incorrect definition of elk security used for the Threemile Project, the agency used the correct definition of elk security for the Threemile Stewardship Project in the 2002 EIS. This EIS at 3-79 states that security areas are defined in terms of cover blocks (250 acres or more in size) that are at least 0.5 miles from an open road. At the same time, this EIS did not actually measure security as per this definition, instead just measuring the amount of forested cover in areas over 0.5 miles of an open road. This shows that the level of big game security would never come close to the recommended 30% security, as forested cover in these unroaded areas was at best 17% (Table 3.29 at 3-80).

The impact of the proposed 28.3 miles of new temporary roads (EA 20) on elk and deer security is shown to reduce areas further than 0.5 miles from an open road from 36% down to 22-25%. The effect on elk displacement during the hunting season is never addressed. However, the design criteria for big game in the EA at page 24 do not include any restrictions on road use or treatment activities during the fall hunting season.

It should be noted that the only mitigation measure to be implemented for big game during the proposed activities (EA 24) is that viable hiding cover within 75 feet of open roads or large openings will be retained where feasible. It is not clear what is meant by “viable” hiding cover, although the photo provided in Figure 5 in the Wildlife Report at 69 shows a stand of dense sapling trees, or the standard definition of hiding cover. There is no information, however, as to what percentage of roads this mitigation measure will impact. For example, past activities have included thinning of many acres of cover along roads (EA 32).

**4. The agency is violating the NEPA by failing to identify and evaluate cumulative impacts on wildlife habitat from the 2003 Record of Decision for the Threemile Stewardship Project.**

The ROD for the Threemile Stewardship Project was signed in 2003. This decision has been implemented except that the logging proposals did not sell. Table 2 of the ROD at 12 identifies all the proposed non-logging treatments for the selected Alternative 4. This included fuel treatments on 1,952 acres of ponderosa pine forests and juniper habitat, 7,312 acres of burning in ponderosa pine forests, 1,224 acres of burning juniper, and 17,204 acres of burning grasslands, which would include sagebrush habitats. There is no information in the Threemile EA, including maps, that defines how this ROD was implemented, or how it changed wildlife habitat, including hiding cover, old growth, goshawk habitat, sagebrush habitats and associated species, and mule deer critical winter range, for example. Without this key information, the public has no basis for understanding what the objectives are for the additional proposed treatments, including why previous objectives were either not correctly defined. In particular, it is now known how many acres of hiding cover, old growth, or sagebrush cover were removed as a part of this decision.

**5. The agency is violating the NEPA and the NFMA by failing to evaluate the past and planned actions on the turkey population on the District.**

As noted by Objector Tom Carroll (Appendix C of this objection), the turkey population in this landscape has suffered severe impacts from past fires. Given its reliance on older, dense ponderosa pine stands, especially in the winter, the project will clearly exacerbate past impacts on this species. Yet there is no management strategy ever identified to turkeys, or any information on population trends. This project will have significant adverse impacts on this population, a fact that was never noted in the Threemile Project EA or Wildlife Report. These impacts require completion of an EIS.

**6. The project will exacerbate ongoing declines of the management indicator species for old growth on the forest, the Northern Goshawk failure of the NEPA documents to identify this impact, as well as a failure to provide any monitoring data on goshawk population trends on the District, are violations of both the NEPA and the NFMA.**

The goshawk is a management indicator species (MIS) for old growth in the 1987 Custer Forest Plan at page 17. This is also noted in the Project Wildlife Report at 10, and the Project EA at 68. There is one known nest in the project area that fledged 2 young in 2017. This nest occurs in the southern portion of the project area that has not experienced many forest fires in recent years. There is no map of the postfledging area (PFA) for this nest in the project EA or Wildlife Report, and no map that shows where the proposed treatment units are in relation to habitat in the PFA. However, it is clear that many of the proposed logging units are in the immediate vicinity of this nest.

This portion of the project area could supposedly provide habitat for 4 goshawk territories (Wildlife report at 26). Nesting habitat in the project area was identified as 3347 acres in the Wildlife Report at 26. This is only about 10% of the project area. Nesting habitat would also provide goshawk foraging habitat, particularly for red squirrels, one of the key prey species for goshawks in Montana (Clough 2000). There is no analysis in any of the project NEPA documents about current or planned levels of goshawk foraging habitat. At least 40-60% foraging habitat is recommended for goshawk territories as per the current best science by Reynolds et al. (1992). Goshawk experts have stated that these guidelines can be applied to ponderosa pine forests on the adjacent Black Hills (USDA 2000), and would like also be applicable to the Ashland Ranger District. In fact, in 2002 the Ashland Ranger District noted that the Reynolds et al. (1992) goshawk guidelines were applicable to the District (Threemile Stewardship EIS).

The proposed project has a huge probability of eliminating this active goshawk nest in the Threemile Creek landscape. Direct habitat loss will result from 3,160 acres of planned logging, including both forest thinning and clearcutting. Goshawk foraging habitat needs a minimum of a 40% canopy, and all logging units will result in canopy closures under 40%. The logging of 3,160 acres will reduce current high quality foraging habitat for this active goshawk territory from 10% down to almost nothing. Clearcutting as well as forest thinning will reduce red squirrel populations (Holloway and Malcolm 2006), a key prey species for goshawks in Montana (Clough 2000) as well as ponderosa pine forests on the Black Hills (USDA 2000). In addition, these logging treatments will increase the presence of openings over 4 acres in size, which eliminates them as goshawk foraging habitat (Reynolds et al. 1992; 2003 Threemile Stewardship EIS 3-55, 3-62). The proposed openings in the Threemile project can exceed this size.

An increase in openings in the active goshawk territory in the Threemile Project Area could easily convert this portion of the landscape into red-tailed hawk habitat rather than goshawk habitat. As landscape become more open, this transition from goshawks to red-tailed hawks has been reported (La Sorte et al. 2004). The Threemile Stewardship Project ROD at 13 noted that this landscape already contains 2 known nests of red-tailed hawks.

The EA and Wildlife Report stated that even if this project resulted in the loss of this active goshawk territory, it would not impact the goshawk population across the District or the Forest (EA 68, Wildlife Report at 10). However, there was no supporting documentation provided to substantiate this claim. In fact, it appears that goshawks on the District have significantly declined due to past fires, and possibly logging. The Project EA at 3 notes that 184,700 acres of extensive acreages of forest cover have burned between 1995 and 2012; Figure 2 at page 4 notes there has been a 40% decline in forest habitat as a result. These burns include 5068 acres of forest in the Threemile project area. The Montana Natural Heritage Program monitoring work published in 2009 provides a good display of what the current goshawk population is like on the Ashland Ranger District. Table 3 at pages 7-8 include the following information on goshawk monitoring in 2009:

- 17 potential and/or known nest territories on the District
- 9 of these territories were monitored in 2009; 2 were found to be active.
- 5 of the 17 territories were not monitored due to extensive impacts from forest fires that removed habitat.
- 3 other territories were not monitored, apparently due to a lack of time.

These results show that 6 goshawk territories were affected by fire, and 3 other have been impacted by prescribed burning; one territory has been impacted by logging. This means that 10 of the 17 known/potential territories have experience some type of habitat loss/degradation. This year's monitoring resulted in only 2 active nests being identified on the District.

In 2016, Bachen did additional goshawk surveys on the Ashland Ranger District. He found 2 active goshawk nests on this District, along with 2 active nests on the Sioux Ranger District, and one on the Beartooth Ranger District.

Although some monitoring information is available on goshawk population trends on the Ashland Ranger District as well as adjacent districts, none of this information was included in the Threemile NEPA documents. Yet the agency claimed that goshawk populations remain viable in this overall landscape. This is a NEPA violation for failure to support claims with available information, and an NFMA/NEPA violation for failing to ensure that habitat trends of MIS are not being monitored and considered when vegetation treatments are being planned. The Forest Plan requires maintenance of viable populations of wildlife (Forest Plan at 16).

**7. The agency failed to identify that past and planned actions in the Project Area will result in significant adverse impacts to wildlife species associated with old growth and snag habitat; the agency is violating the NFMA due to the failure to ensure that old growth and snag habitats will be maintained on the Forest to ensure that viable populations of associated species will be maintained.**

There are roughly 20 species of forest birds associated with older growth forests at some point in their life cycle (USDA 2018, Table 3-87 at page 3-226-227). Many of these species are also dependent upon snags (USDA 2018, Table 3-88 at 3-340-341). Wildlife dependent upon snags has been reported to include about 25% of all forest birds (Bull et al. 1997).

There are apparently no old growth stands in the Threemile Project Area (Project EA at 19). It is not clear what specifically happened to the 2200 acres of identified old growth in the project area in the Threemile Stewardship RFEIS, Table 3.3 at 3-10. It seems unlikely that all this old growth has been destroyed by fire, since the southern portion of the project area has not experienced widespread fires at this time. Even if there were no currently-suitable old growth stands, this should not preclude the agency from managing for future old growth. In fact, the District in 2002 identified that timber management included maintaining 20% old growth (Threemile Stewardship EIS Appendix C-5). This objective of 20% old growth is the minimum that is recommended for forest songbirds in dry coniferous habitat and more moist coniferous forest habitats (20-25%) (Montana Partners in Flight 2000). The southwest goshawk guidelines also recommend 20% old growth in goshawk habitats (Reynolds et al. 1992). These recommendations would be the minimum amount of old growth that has been estimated on historical landscapes in the northern Rocky Mountains, which is from 20-50% of the landscape Lessica 1996).

One of the important values of old growth forests is that it provides relatively high densities of snags within a forested environment, which is needed by most forest birds (Bull et al. 1997, Table 1 at 30). This is relatively old science, yet the Custer Forest Plan still uses the outdated snag management strategy promoted by Jack Ward Thomas many years ago. AS was noted by Bull et al. (1997 at 28-29, 31), that strategy does not provide all the habitat needs for wildlife, including foraging habitat and a forested environment. A good example of this is the brown creeper, a species that requires large tracts of contiguous, older dense forests (Wiggins 2005). There is also much more current science that reports that only about 4% of all snags can be function cavity trees due to hardness (Vizcarra 2016). So even if there were 2 snags per acre within a forest, this would not ensure that cavity nesting habitat actually existed.

This new science was completely ignored in the Threemile Project EA and Wildlife Report. For example, one of the concerns for treatments were to prevent mountain pine beetle attacks, the same factor that is essential for cavity-nesting wildlife. This conflict was never identified in the project NEPA documents.

The failure of the agency to address habitat needs of forest birds will contribute to significant national declines of many bird species. The number of breeding North American birds has plummeted by approximately 1.5 billion over the past 40 years, according to a new report; forty-size species have lost at least half their populations, primarily through urbanization and habitat degradation (Scientific American page 22, December 2016 issue).

The huge importance of snags and old growth to wildlife also includes a number of bat species, including the threatened Northern Long-eared Bat, and Montana Species of Concern, the Fringed myotis, hoary bat, and little brown bat (Wildlife Report at 13). The extent of management for this vulnerable suite of bats is that the treatments will maintain 2 snags per acre “if available.” There have been no snag surveys in the project area, along with a lack of any bat surveys as well; mitigation measures are nothing but window dressing, where “if bats are located, their habitat will be protected.” It is unclear how these bats will be located, however.

The lack of any actual commitment to snag habitat in the proposed project is further demonstrated by the lack of any analysis as to how leaving existing snags will maintain snag habitat over time. The snag management program

is nothing more than window dressing for this project, even though snag and old growth management impacts a significant percentage of forest wildlife. There is no way the agency can avoid significant adverse impacts to snag and old growth-associated species without valid, effective plans for these critical habitats. At a minimum, the MIS for old growth on the Custer, the goshawk, needs to have habitat standards as a means of ensuring viability.

**8. This section includes a number of other issues and concerns that objectors have with this project, including:**

a. There were no action alternatives that addressed the issues that NEC raised in scoping or the draft EA comments. The proposed alternatives A and B are basically identical, and both call for extensive degradation of the limited forest habitats in this landscape. There was no alternative that emphasizes wildlife over range management and timber management. It is a violation of the NEPA to fail to address public issues in the development of alternatives.

b. The agency is logging timber on unsuitable forest lands (EA 21, Table 6); the acreage of logging on unsuitable lands is never disclosed, however. The ROD for the Threemile Stewardship Project at 25 notes that logging on unsuitable timber lands is allowed only if it restores ponderosa pine forests, or enhances wildlife habitat. Neither is the case for the Threemile project logging, as wildlife habitat will be removed, not enhanced; removal and thinning of ponderosa pine forests is not restoration, as it alters natural conditions for the affected habitat types, including lowering the natural basal area. This logging of unsuitable timber areas for this project is a violation of the NFMA and the NEPA as a result.

c. The purported mitigation measures for various raptors cited in the project NEPA documents is merely window dressing, as there have been no surveys done for either merlins or golden eagles in this project area. Buffers around nesting areas during the nesting season cannot be provided if the nests are never located through surveys.

d. It appears that the agency has had an ongoing program to eliminate sagebrush in this project area to benefit livestock. The Threemile Stewardship Project EIS at 3-68 stated there was a sage grouse lek in the project area in 1980, but it no longer exists. This lack of presence was also noted in the Project Wildlife Report at 8. It is impossible to determine in the

project NEPA documents as to what the historical level of sagebrush was in this landscape, and how many acres has been repeatedly burned to remove it. Since the current project includes more prescribed burning, which could affect sagebrush, the cumulative impacts of past burning on this key shrub species for wildlife needs to be evaluated as a NEPA requirement. Even though sage grouse are gone, the Brewer's sparrow and sage thrasher, both species associated with sagebrush, are still noted to be present in the project area.