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To: Objection Reviewing Officer
Forest Servicel Northern Region
26 Fort Missoula Road
Missoula, MT 59804

RE: OBJECTION AGAINST THE ROUND STAR PROJECT ON THE TALLY LAKE RANGER DISTRICT OF THE FLATHEAD NATIONAL FOREST.

1. Objectors

Lead Objector Sara Johnson, Director1 Native Ecosystems Council1 PO Box 125, Willow Creek, MT 59760; phone 406-579-3286; sjjohnsonkoa@yahoo.com. Mike Garrity1 Directorl Alliance for the Wild Rockies1 PO Box 505, Helena, MT 59624; phone 406-459-5936; wildrockies@gmail.com.
Jason Christensen, Director, Yellowstone to Uintas Connection, PO Box 363, Paris, ID 83261; phone 435-881-6917; jason@yellowstoneuintas.org.

Signed for Objectors this 6th : of October, 2022

Sara Johnson

2. **Project being Objected to**

Round Star Project on the Tally Lake Ranger District of the Flathead National Forest.

3. **Responsible Official(s)**

William Mulholland, Tally Lake District Ranger; Flathead National Forest Supervisor, Kurt Steele

4. **Connection between Proposed Project and Prior Written Comments by Objectors**

On January 3, 2022, Objectors provided scoping comments for the proposed Round Star Project. Twenty-issues were raised: the WUI has been incorrectly defined; the Biological Opinion for the Flathead Forest Plan is invalid; an analysis of illegal motorized road/trail violations is required for the project to assess impacts to the grizzly bear; there was a request to evaluate the project impact on connectivity of grizzly bears in the Salish Demographic area between grizzly bear populations in the Northern Continental Divide Ecosystem to the north and the Greater Yellowstone Ecosystem to the south based on the 19/19/68 habitat requirements for grizzly bears; the Biological Assessment and Biological Opinion for the Revised Flathead Forest Plan (RFP) regarding lynx and lynx critical habitat are invalid because the Northern Rockies Lynx Management Direction is not based on the current best science; Forest Service reliance on an invalid Biological Opinion in the RFP for lynx is a violation of the ESA; the RFP failed to evaluate how the Northern Rockies Lynx Management Direction would impact snowshoe hare populations, a key prey species for lynx; we requested an evaluation of how the Round Star Project would impact snowshoe hares, an important prey species for lynx, fisher, pine marten and wolverine; we requested that the Forest Service

address how the term "resilience" relates to wildlife; we requested a 60-day comment period be provided for openings over 40 acres; we also requested that the agency define the size of each openings that will exceed 40 acres; we requested that the agency provide an analysis of how large openings in the project area would impact migratory bird, lynx, fisher, pine marten and elk security (as defined by the current best science) and elk displacement to adjacent private lands; we requested that the FNF complete a Forest Plan amendment which evaluates the impact of large openings on wildlife, since this was not done in the RFP; we requested that the agency measure motorized impacts on wildlife when the route use exceeds 2-4 vehicle trips per day; we questioned why an Environmental Impact Statement (EIS) was not required for the project given that elk habitat effectiveness would be less than 50%; we noted that the project also requires completion of an EIS due to the cumulative impacts on old growth forests; we requested that a map of old growth be provided for the project area; we requested that definitions of old growth be based on the complete definition of Green et al. (1992, errata 2011), which includes "associated characteristics along with minimum criteria; we requested that the old growth strategy in the Round Star Project Area for 31 wildlife species associated with old growth in the Flathead National Forest be defined as to how viability and wildlife species diversity will be maintained as is required by the National Forest Management Act (NFMA); we requested documentation that fuels treatments in old growth would not affect any of the 31 old growth-associated wildlife species on the FNF; we noted that the direction in the RFP does not conserve 52 wildlife species associated with snags, which is a violation of the NFMA; we requested that the FNF discontinue any vegetation projects until the RFP is amended to include valid conservation strategies for old growth and snag-associated wildlife; we noted that the RFP did not evaluate how vegetation treatments would impact 67 species of western forest birds, which is also a violation of the Migratory Bird Treaty Act (MBTA); the RFP needs to be amended so that forest management activities are designed to maintain migratory birds through the implementation of valid conservation strategies for these species; we noted that there is no current science that demonstrates that vegetation treatments can restore whitebark pine; we requested that the Round Star NEPA analysis clearly address how the project will adhere to RFP direction for the Salish Geographic Area, including by evaluating the required habitat assessments for the fisher and flammulated owl,

how the current level of elk security will be met, and what the forage/cover mosaics within each security will be before and after project completion; and finally, we requested that the agency define how the proposed project would affect early-spring snowmelt and thus water availability in streams and rivers in late summer.

The various details provided in our scoping comments regarding these issues are being incorporated by reference into this objection, in order to avoid repetition.

On July 18, 2022, Objectors submitted comments on the draft Environmental Assessment (EA) for the Round Star Project. Our first concern was the amount of project information that was not in the EA, but instead was in the Project File; although the draft DN noted that this material was available upon request, it was treated as a Freedom of Information Act (FOIA) request when NEC requested project file information; instead of making the public take additional steps to obtain information related to the Round Star Project, this information should have been provided on the web site for this project. We provided extensive comments on how the current direction in the RFP for both old growth habitat and snag habitat is invalid, and will not conserve associated species (at least 38 species); old growth management is invalid due to the use of minimum Green et al. (1991) criteria rather than requiring all associated characteristics be maintained. The agency does not plan to address the current short-fall of old growth in the project area by recruiting existing mature stands; we requested that the agency address how the current level of old growth in the Round Star Project Area meets recommended levels for wildlife. We noted that the RFP methods for measuring elk security are invalid, and cannot be used to determine the level of significant impacts on elk security and elk vulnerability in a project. We requested that the agency complete an analysis of elk security that uses the current best science, not an agency-created definition of security. We requested that the agency provide an analysis of elk habitat effectiveness so that the level of project impacts can be identified, including if significant impacts may result from all the new road construction. We referenced the collaborative recommendations developed by the Forest Service and Montana Fish, Wildlife and Parks

(USDA/MFWP 2013) as a good analysis tool for assessing project impacts on elk. We noted that the RFP guideline to maintain thermal cover for deer on winter range will be violated due to forest thinning, and we requested this RFP direction be adhered to. We noted that the agency analysis for Round Star did not include the required analysis of fisher habitat, including the level of openings and mature forest habitat in a potential fisher home range. We requested that RFP direction to identify flammulated owl habitat be adhered to. As in our scoping comments, we again requested that the agency complete an analysis of how large openings will impact wildlife (e.g., fisher, goshawks, pileated woodpecker, black-backed woodpecker, elk security areas), as well as forested snag habitat required by most wildlife species associated with snags. We noted there was no description of each planned opening. We noted that the NEPA analysis for the Round Star Project did not define any baseline conditions for wildlife. Instead, the only baseline information provide was on forest habitat, instead of wildlife. As a result, the public has been denied any information as to how past agency management has affected wildlife. This is important since the impact of additional management on wildlife is unknown except through "estimates" by the agency. The baseline condition at a minimum requires that wildlife surveys be done, at least for Montana Species of Concern.

We provided extensive comments on management of lynx and lynx critical habitat that is evaluated and proposed for the Round Star Project. The EA had extremely limited information on the analysis of lynx and lynx critical habitat, with no maps of LAUs or planned treatment units within lynx and lynx critical habitat within the project area. We referenced many problems with the Northern Rockies Lynx Management Direction (hereafter "Lynx Amendment") which results in an ineffective conservation strategy for lynx, and as well, invalid Biological Evaluations and Biological Assessments, including those developed for the RFP. Another serious problem with agency management of lynx via the Lynx Amendment is a complete failure to monitor lynx population trends, including how the Lynx Amendment is impacting populations. The invalid proxy for "take" of lynx can never be met, and it has not been met in the 15 years it has been used as a proxy. We noted that the agency needs to amend RFP direction for lynx and lynx critical habitat so that a valid conservation strategy based on the current best

science is implemented to avoid extinction of the lynx in the Northern Rockies. We also requested that a valid Wildland Urban Interface be defined for the project, and that exceptions for logging of lynx habitat be limited to this valid WUI in order to avoid a violation of the RFP.

As per grizzly bear management, we see now that there has been a revised BiOp for grizzly bear management, finalized in February of 2022. However, this revised BiOp still does not address the key conservation needs of the grizzly bear. For the Round Star Project, a massive increase in roads is planned. The agency management strategy is that roads only impact grizzly bears if the general public is using them. As such, the NEPA analysis of the Round Star Project for grizzly bears in invalid, as the huge increase in motorized access is not identified as an adverse impact to grizzly bears, in direct conflict with the current best science. In addition, the long-term impact of the huge increase in roads in grizzly bear habitat of the Round Star Project through illegal motorized use was not measured for the project. In effect, the project will have a huge increase in motorized use, both legal and illegal, which will severely impact displacement of grizzly bears in this designated connectivity area. This significant impact is not only a violation of the RFP, the ESA, but the NEPA as well, since these significant impacts require completion of an EIS.

Finally, we noted that the agency has violated the NEPA by failing to develop a range of alternatives that address public issues. We had previously identified many issues and concerns via our January 2022 scoping comments. Yet there were no action alternatives developed that would emphasize management of wildlife, including the threatened grizzly bear and lynx, as well as various Montana Species of Concern.

Rather than repeating much of the information provided in our 30-day EA comments, we are incorporating "by reference" much of this material. One change is that we are providing references in Appendix A attached to this objection.

5. Remedy

The Round Star Project, due to the planned violations of the NEPA, the NFMA, the ESA, the APA, and the MBTA, should be withdrawn as a proposal. Any future vegetation treatments projects on the Flathead National Forest should not go forward until the RFP is amended to provide valid conservation strategies for old growth-associated wildlife, snag-associated wildlife, various wildlife species identified as Montana Species of Concern, the grizzly bear, and the Canada lynx. Without these valid conservation strategies for wildlife, any NEPA analysis for vegetation treatments will be invalid because adherence to RFP direction will not ensure significant adverse impacts will be avoided, or as well, that a diversity of wildlife will be preserved on the forest.

6. Laws and Regulations that Objectors believe will be Violated with Implementation of the Round Star Project

I. The Forest Service and the U.S. Fish and Wildlife Service are violating the Endangered Species Act (ESA), the National Environmental Policy Act (NEPA), the National Forest Management Act (NFMA), and the Administrative Procedures Act (APA); examples of these numerous violations include presenting false analyses and false conclusions in regards to the conservation of lynx and a key prey species, the snowshoe hare, in the landscape affected by the Round Star Project because the measure of existing and proposed lynx habitat and lynx critical habitat is based on the Northern Rockies Lynx Management Direction (hereafter "Lynx Amendment"), which does not use the current best science for conservation of

lynx and lynx critical habitat; the proposed project will exacerbate existing adverse impacts on lynx and lynx critical habitat, impacts that were not disclosed by the agencies, and impacts that are allowed by the Lynx Amendment; application of the Lynx Amendment to the Round Star Project, and as well, as direction for the Revised Forest Plan of the Flathead National Forest, ensures that lynx will be progressively extirpated from the Round Star Project Area as well as across the Flathead National Forest.

A. Agency analyses based on the Northern Rockies Lynx Management Direction (hereafter "Lynx Amendment") are invalid and cannot be used as a basis to measure impacts of the Round Star Project on lynx and the snowshoe hare.

1. The definitions of lynx habitat used in the Lynx Amendment are extremely vague and can be arbitrarily assigned without any actual documentation.

The definitions of lynx habitat (5 types) as per the Lynx Amendment are provided in Table 50, page 76, and Table 51 page 77 of the project Environmental Assessment (EA). These include early stand initiation (young clearcuts that do not provide winter snowshoe hare habitat), stand initiation (older clearcuts that provide winter snowshoe habitat), mature multistory (older forests that provide winter snowshoe hare habitat), and other which actually includes 2 categories of lynx habitat, including stem exclusion (forests with a closed canopy and limited understory that do not provide snowshoe hare habitat), and multistory forests (do not provide winter snowshoe hare habitat because cover is not dense enough).

There are no specific criteria for any of these 5 habitat categories. Their delineation by the Forest Service is based solely on agency discretion, including

identifying which habitats do not contain snowshoe hares. No actual sampling of hare densities/use is required.

A determination that some areas in landscapes occupied by lynx do not contain snowshoe hares, and thus do not provide lynx habitat, without any actual sampling of hare densities and/or use, such as pellet counts, means that vast acreages of lynx habitat can be arbitrarily excluded from protection as per the Lynx Amendment. First, snowshoe hares are not either "present" or "absent" from habitats. As noted in Squires and Ruggiero (2007), in the Seeley Lake area, snowshoe hare densities were highly variable and occurred in many different forest types in both summer and winter. In the winter, densities were 0.2 hares/ha in mature open forest, 0.53 hares/ha in mature dense forest, 0.47 hares/ha in young dense forests, and 0.12 hares/ha in young dense forests. In the summer, mature open forests had 0.18 hares/har, mature dense forests had 0.34 hares/ha, young dense forests have 0.64 hares/ha, and young open forests had 0.18 hares/ha.

The wide distribution and variability of hare densities in lynx habitat was also noted by Holbrook et al. (2017s). In suitable forest habitats with at least a 40% canopy, 67% were occupied as indicated by pellet counts; hare densities were highly variable, including 4 categories of densities: 0.28, 0.81, 1.48 and 4.21 pellets/ha.

Kosterman et al. (2018) Table 1 defines lynx habitat has having low, medium and high densities of snowshoe hares across the landscape, including all habitats (100% of the landscape). None of the defined habitats have "zero" hare potential.

Also, Walker (2005) noted that snowshoe hares do not just use the very best habitat patches. Other lower-quality habitats provide "matrix habitat," or areas that are used for dispersal, connections with other hares, and possibly use of additional resources. Matrix habitat is an important habitat features that

ultimately determines landscape densities of hares. Id. As such, the Lynx Amendment strategy of just saving the very best patches of hare habitat is an invalid ecological practice.

In conclusion, there is no science that defines snowshoe hare habitat as either "present" or "absent." This habitat classification procedure in the Lynx Amendment clearly misrepresents ecological conditions for snowshoe hares and lynx on the ground.

No actual sampling is required, as well, for identifying stand initiation habitat for hares, a very important winter habitat. These stands require very dense conifer stands that extend above winter snows. The Lynx Conservation Assessment and Strategy (LCAS, Ruediger et ala. 2000 at 1-4) defines stand initiation habitat for hares as 4,500 stems or more per acre. The Final Environmental Impact Statement (FEIS) for the Lynx Amendment at page 150 cites research by Ruggiero et al. (2000) that stem densities of 5,000 per acre or more provide good snowshoe hare winter foraging habitat. This same document defines 2500-5000 stems per acre or less as potential winter hare habitat, depending on distribution in the stand. Stands with less than 2500 stems per acre would not provide any potential winter hare habitat. *Id.* Sampling of stand initiation stands would be required to determine if these actually provide a key winter habitat for hares and lynx. If the young forests lack the required density, they would not qualify as hare/lynx winter habitat, but instead, would be classified by the current best science as "sparse forest" that is avoided by hares and lynx in the key winter period (Holbrook et al. 2018, Squires et al. 2010).

2. The habitat categories used for the Lynx Amendment are highly inconsistent with the current best science, and as such, cannot actually measure and define the quality and amount of lynx habitat across a landscape.

There is recent published science that defines lynx habitat quality. These include Kosterman et al. (2018). This publication defines lynx habitat at Table 1 as follows, with all habitats within the landscape included:

Open: no trees or canopy present, low horizontal cover; these areas have a low density of snowshoe hares.

Sparse Forest: naturally sparsely stocked or mechanically thinned stands with a discontinuous canopy and visible forest floor, low horizontal cover; these areas have a low density of hares.

Small-diameter regenerating forest: regenerating forests generally due to forest management with smaller-sized (10-15 cm DBH) trees, intermediate canopy cover, and high horizontal cover; capable of producing high density of snowshoe hares over a limited time frame, but hares are potentially difficult to access and kill for lynx because of high stem densities (cites 6 research publications).

Medium-diameter regenerating forest: regenerating forests from forest management with medium-sized (15-20 cm DBH) trees and continuous canopy and high horizontal cover; capable of producing high density of snowshoe hares over a limited time frame, but hares are somewhat accessible because of intermediate stem densities (cites 6 research articles).

Mature forest: a multistoried or uneven-aged stand with a median DBH of 10 inches (26 cm); this DBH is reflective of the multistoried nature of the structure class, but despite this DBH, there was a comparatively high proportion (i.e., 22%) of large trees (over 38 cm DBH); common attributes in this class were substantial understory (e.g., seedlings and saplings) and horizontal cover, continuous canopy, and no evidence of recent disturbance; capable of producing medium density of

snowshoe hares over a long time frame, and kill rates are higher for lynx because stem densities are lower than regenerating classes (cites 4 research publications).

Holbrook et al. (2017a) also provides in-depth descriptions of lynx habitat. These include 4 habitat categories, with all habitats in the landscape included within these definitions.

Sparse: mixed-conifer stands that are sparsely stocked (naturally or mechanically thinned), which tend to be younger (i.e., 10-20 years old) but can occur at any age; sparse stands exhibited a median basal area-weighted DBH of 6 inches, 28% canopy cover, and a median estimated tree height of 34 feet, and a medium basal area of 40 square feet/acre, while tree density for larger trees over 5 inches was 48 trees/acre; tree density for trees less than 5 inches DBH was 900 trees/acre.

Stand Initiation: stands have few trees and an open canopy, and are a result of recent (less than 5 years) disturbance (forest harvest or severe fire); stand initiation exhibited a median basal area-weighted dbh of 0 inches, 8% canopy cover, and a median estimated tree height of one foot; median basal area of stand initiation was 0 feet/acre, while tree density for trees over 5 inches dbh was 0 trees/acre and tree density of trees over 5 inches dbh was 0.

Advanced Regeneration: early-mid seral stands of ages 25-40 years with a mixed species composition, but spruce-fir tends to occur the most frequently; advanced regeneration exhibited a median basal area-weighted dbh of 8 inches; 70% of plots had size classes between 5 and 15 inches dbh; exhibited a median canopy cover of 45%, median tree height of 51 feet, and a median basal area of 89 square feet/acre; tree density for trees over 5 inches dbh was 167 trees/acre, and tree density for trees less than 5 inches was 900 trees/acre.

Mature: mid-seral stand of age at or over 40 years arranged in multi-storied structure with a mixed species composition, but spruce-fir tend to occur twice as much as any other species; mature exhibited a median basal-area weighted dbh of 10 inches; 45% of trees were classified as 5-10 inches dbh, 25% of size classes were between 10-15 inches dbh, and 21% were classified as between 15-25 inches dbh; had a medium canopy cover of 56%, median tree height of 65 feet, and a median basal area of 140 square feet/acre; tree density of trees over 5 inches dbh was 217 trees/acre, and tree density of trees under 5 inches dbh was 1500 trees/acre.

3. The habitat standards to conserve lynx in the Lynx Amendment are extremely limited, apply to only pieces of a landscape occupied by lynx, and only limit the amount of openings in what has been defined as lynx habitat; openings across the landscape occupied by lynx are not restricted by any standard; in addition, the ALL S1 standard to maintain connectivity has no criteria for compliance, which makes this standard meaningless.

Although the Lynx Amendment has 6 habitat standards for lynx habitat, only one standard, VEG S1, requires a specific level of lynx habitat within a Lynx Analysis Unit (LAU). VEG S1 allows up to 30% openings in lynx habitat within a Lynx Analysis Unit (LAU). VEG S2 limits the timing of creating openings (only 15% of these openings can be created in 10 years) but still allows 30% openings in lynx habitat. VEG S5 requires winter snowshoe hare habitat provided in regenerating clearcuts not be reduced outside the Wildland Urban Interface (WUI), but can be reduced within the WUI; no amount of this winter snowshoe hare habitat in regenerating forests is required within lynx habitat within LAUs. This is also the case with multi-storied lynx habitat; VEG S6 directs that existing levels, whatever they are, are to be maintained outside the WUI; these levels, whatever they are, can be reduced within the WUI. The WUI is identified for each project, including Round Star. Most of the lynx habitat and lynx critical habitat in the Round Star project is located in the WUI (see Figure 6 in EA at 111, map of WUI, and Figure 2 of project file report Q-2, that shows lynx habitat and lynx critical habitat.

The 6th standard in the Lynx Amendment, ALL S1, requires that habitat connectivity in lynx habitat within LAUs be "maintained", including due to vegetation management. There are no criteria as to what constitutes "maintenance." The glossary for the Lynx Amendment Record of Decision (ROD) defines maintenance as providing enough habitat in lynx habitat to conserve lynx; it does not mean to keep the status quo. There is no definition provided in the Lynx Amendment as to what is enough habitat connectivity to conserve lynx.

The project impact on this ALL S1 standard was addressed in only general terms, with no specific quantitative criteria projected for this standard. There was no Forest Plan amendment proposed for this Forest Plan standard, so it is apparent that the agency believes this standard will be met with the project. This apparent conclusion seems to have been derived with no actual analysis of current or proposed levels of connectivity. In the Project EA, levels of habitat connectivity were defined in general terms for the Round Star project as "greatly limited" and "moderately limited," (Project EA at 73). The EA at 77 again defines connectivity in the LAUs as "forest patterns contributing to connectivity are somewhat limited in the Ever Redi LAU and limited in the Sheppard LAU due to limited presence of connected multistory habitat. The EA at 80 states that connectivity would be impacted by large openings which lynx avoid; travel patterns may change; however, connectivity will still exist; connectivity of forest cover would not be served by the proposed vegetation treatments.....proposed treatments in the outer and inner RMZ could alter travel patterns.....lynx travel patterns between patches of foraging habitat could change due to large regeneration units in the proposed action which would create open areas that lynx avoid; 36 units, alone or in combination, would be over 40 acres.....while individual lynx may avoid regeneration treatments, these treatments are distributed across the project area allowing for connectivity corridors to persist in those areas not receiving treatments as well as those receiving intermediate treatments.

In the draft Decision Notice, it was stated that forest patterns will continue to contribute to connectivity of habitat for lynx movement within and between home ranges, and dispersal between populations; connectivity of forested cover

will not be severed by vegetation treatments; while lynx travel patterns may change in respo9nse to project activities to avoid existing forest openings, high quality foraging habitat will remain connected for traveling by lynx across the project LAUs.

In summary, there is only one defined level of habitat required for lynx in lynx habitat by the Lynx Amendment: no more than 30% openings in lynx habitat. This does not mean that the landscape occupied by lynx can have no more than 30% openings. There is no restriction on areas within an LAU that the agency claims is not lynx habitat. So the actual level of openings across landscapes occupied by lynx could well exceed 30%. There is no standard to limit the size of openings. This means that the Round Star Project can create unlimited openings in lynx habitat and lynx critical habitat up to 150 acres. The actual size of the 36 single or combined openings to be created by the Round Star project in lynx habitat and lynx critical habitat was never identified by the agency. Yet the science is clear about limiting the size of openings in lynx habitat. Squires et al. (2010) reported the average crossing distance of lynx in openings in the winter was only 379 feet; the maximum width crossed was 1243, which is remarkably close to the maximum width recommended by Brittell et al. (1989). The Lynx Amendment was supposedly based on Brittell et al. (1989) (Lynx Amendment ROD 9, 16, Lynx Amendment FEIS at 72). This document recommended that openings in lynx habitat should b less than 300 feet wide, as lynx generally do not cross openings over this width; this document also noted that openings should not exceed 1200 acres, but less than 600 feet would be optimal; the size of clearcuts recommended in this document was 20-40 acres. It is important to note that Brittell et al. (1989) would limit the amount of total open areas to 30% of each square mile, not within an entire LAU, as is the case for the Lynx Amendment.

The Lynx Amendment has no valid conservation strategy for snowshoe hares in lynx habitat. Clearcuts, which do not provide winter snowshoe hare habitats, may comprise 30% of the landscape that is mapped as lynx habitat. There is no restriction on the percentage of clearcuts that may be created in landscape areas not mapped as lynx habitat. It is likely that some or many acres mapped as non-

lynx habitat provide important matrix habitat for hares (Walker 2005). The quality of matrix habitat for hares is an important factor in hare population density. Id. The quality of matrix habitat, which occurs between high quality patches of hare habitat, is key to overall population density of hares. Id. The Lynx Amendment requires only that winter hare habitat in older regenerating clearcuts and some multi-story mature forest be maintained, provided these areas are not located in the Wildland Urban Interface. Since the Lynx Amendment does not require any given level of winter hare habitat, whatever the current level is within LAUs supposedly maintains hare populations. This level could be almost zero, but the Lynx Amendment would not identify this as an adverse impact on hares, and thus lynx. This management strategy is clearly a violation of the NEPA, as it is illogical that any level of hare habitat will maintain hare populations within an LAU.

The Lynx Amendment also allows winter hare habitat to be removed if it occurs within the WUI, regardless of the amount of such habitat within the LAU. It is assumed that these reductions, which could be at least 6% of winter hare habitat, will not reduce snowshoe hare densities below the level required for lynx persistence, even though no actual analysis was ever done. As noted by Squires et al., 2010 at page 1656, Montana lynx depend on a winter prey based at or slightly above the threshold required for persistence; minor reductions in hare densities could disproportionately impact lynx; in addition, winter is the most constraining period for lynx, and starvation mortality is most common in winter. This concern, identified in published literature, was ignored in the Lynx Amendment, where allowed decreases of hare habitat via clearcutting, including up to 6% of lynx habitat, were determined to have no significant impact on hare densities and as such lynx persistence.

Hare populations in the Round Star Project Area in lynx habitat and lynx critical habitat will be significantly impacted by the project, not just from the undefined number of clearcuts in lynx and lynx critical habitat, but by the creation of expansive open areas in matrix habitat (see Figure 3 in Project File Report Q-2). As the amount of open areas in between high quality hare patches increases, hare populations will decrease (Lewis et al. 2011, Walker 2005). There is no doubt

that the Round Star Project will severely reduce existing populations of hares, and thus severely reduce prey for the lynx. The rationale by the agency that this would not significantly impact lynx is based on the Lynx Amendment, where large acreages of hare habitat reductions are allowed without any identified impact on lynx.

Since the Lynx Amendment does not restrict the size of openings in lynx habitat and lynx critical habitat, the Round Star Project may create openings up to 150 acres in lynx habitat, as per the Revised Forest Plan (RFP). The size and number of clearcuts that this project would create in lynx habitat and critical habitat was not identified by the agency. A clearcut of 150 acres could directly eliminate 6 hare home ranges, given the average size of a home range being 25 acres (Griffin 2004). Yet clearcuts of this size are allowed with the Lynx Amendment.

The Lynx Amendment does not require any management of hare habitat except winter habitat in older regenerating clearcuts and older multi-story forests. Thus this amendment allows massive fragmentation of matrix habitat for hares, habitat that is essential to maintain hare populations (Lewis et al. 2011, Walker 2005). Matrix habitat is a key habitat for snowshoe hares, as it provides connectivity between high quality hare patches, as well as potentially provides additional resources; the increased movement required by reducing the value of high quality patches as well as matrix habitat can also increase hare predation; overall as the quality of matrix habitat decreases for hares, hare populations become more clumped in distribution and reduced population density (Walker 2005; Lewis et al. 2011).

The Lynx Amendment does not require any restrictions on road construction in lynx habitat. The document the Lynx Amendment was developed from, or Brittell et al. (1989) said that roads should be kept to a minimum; main roads should be kept primitive to mitigate the effects of disturbance from human activities; roads were recommended to be constructed to minimum standards, especially main access roads; planting trees in closed roads would discourage snowmobile

activity. Although the Round Star EA claims that the science shows roads do not impact lynx, this was incorrect. Squires et al. (2010) noted that "low volume vehicle traffic" did not impact lynx, with low volume being defined as less than 89 vehicle trips per day (page 1657). This is clearly far lower than would occur with logging activity. Also, this research publication noted that dense forest cover in the studied landscape greatly restricted snowmobile access and activity to adjacent lynx habitat.

One of the most key failures of the Lynx Amendment to conserve lynx is to identify currently-occupied lynx home ranges and to provide additional protection to ensure these home ranges remain occupied. Squires (2007) reported to the Forest Service that lynx have a restricted distribution in the Northern Rockies; as such, the few areas that currently support lynx need to be identified and managed accordingly; management needs may be more stringent that required in the LCAS; the amount of thinned forest in areas that support lynx is critical for persistence. Squires (2007) also noted that we do not know if the LCAS standards will provide for lynx viability. The restricted distribution of lynx in Montana is clearly demonstrated in Holbrook et al. (2018), Figure 1.

The restricted distribution of lynx as a key conservation issue was recently noted again by King et al. (2020). This publication reported that based on extensive camera coverage over 7,000 square km in Washington, or 2,695 square miles, that lynx were found to be present in only 20% of potential habitat. This lack of population redundancy was noted as a concern for lynx conservation; it was noted that special refugia are needed for protection and management of lynx. *Id.*

The King et al. (2020) research publication noted that lynx can be quite easily and effectively surveyed with camera monitoring stations; this can provide estimates of not only occupied habitat, but over time, population trend. No such survey efforts have been done for the Round Star project area. Given the heavily disturbed existing condition of this landscape, any remaining occupied areas by

lynx need to be identified and protected, as loss of current lynx home ranges will reduce population redundancy in this landscape, including critical habitat.

An significant, long-term impact of timber production in lynx habitat is the Forest Service's desire to change lodgepole pine forests to other types, which have increased values as commercial timber. For example, the Round Star Project hopes to reduce lodgepole pine forests from 9,020 acres to 5,990 acres, and increase more desirable tree species of western larch and mixed conifer forests from 10,240 acres to 12,540 acres (Table 15, Project EA). As noted in the text at page 27 of the EA, composition within all treated stands would be altered and improved with the proposed action; in thinned stands, this would be accomplished by favoring the preferred species for leave at the time of treatment; preferred species include ponderosa pine, western white pine, western larch, and Douglas-fir; these species are preferred because they are fire tolerant and longer lived with relatively lower levels of insect and disease activity.

The practice of changing tree species composition in lynx habitat, and lynx critical habitat, is an adverse impact on lynx not only because larch drops its needles in the fall and thus does not provide winter snowshoe hare habitat (Squires et al. 2010). And also of significance, lodgepole pine forests have been demonstrated to provide a high value to lynx and snowshoe hares. Holbrook et al. (2017b) noted the following: the abundance of lodgepole pine was associated with snowshoe hare use within a mixed conifer context; at the landscape level, they observed a positive effect of lodgepole pine and horizontal cover on both occupancy and use by snowshoe hares; snowshoe hare occupancy was positively related to canopy cover of lodgepole pine, horizontal cover and tasseled cap greenness; lodgepole pine has been noted to have the most nutritious value to hares than other common conifers; in mixed conifer forests of the Northern Rockies, the abundance of spruce and fir provide horizontal cover for hares, while lodgepole pine provides the high-quality nutrition; they found a species-specific association between snowshoe hares and abundance of lodgepole pine, which they attributed mostly to nutritional mechanisms; managers could use lodgepole pine

as well as spruce/fir, or more specifically horizontal cover, as initial indicators of potential snowshoe hare habitat.

The nutritional value of lodgepole pine to snowshoe hares was previously noted by Griffin 2004. In lynx habitat, the practice of reducing lodgepole pine forests in order to promote other tree species is clearly an adverse and long-term impact on both hares and lynx, and should not be allowed in lynx habitat and lynx critical habitat.

4. The habitat standards for lynx in the Lynx Amendment are not consistent with the current best science.

The Lynx Amendment does not require that lynx habitat and lynx critical habitat be maintained based on the current best science. This current best science as per Kosterman et al. (2018) defines high quality lynx core habitat (production of kittens occurs) as follows:

Mature forest: 49%

Medium dbh regenerating forest: 24%

Small dbh regenerating forest: 13%

Openings: 4%

Sparse forest: 10%

Holbrook et al. 2019 defined high quality lynx habitat (production of kittens occurs) as follows:

Home Range:

Advanced regenerating forest: 19%

Mature forest: 49%

Sparse forest: 26%

Open (stand initiation): 5%

Core Habitat:

Advanced regenerating forest: 18%

Mature forest: 58%

Sparse forest: 23%

Open (stand initiation): 4%

The Lynx Amendment standard for 30% openings is clearly a failure to promote the conservation of the lynx, or to protect critical habitat. The current best science, as summarized above, calls for 4-5% openings in lynx core and lynx home ranges, respectively (see above summaries). The Lynx Amendment allows 6 times the amount of openings as found by the current best science to occur in high quality lynx habitat, or habitat where lynx can successfully produce kittens.

The Lynx Amendment has no standard for the amount of older regenerating forests (stand initiation habitat) in lynx habitat or lynx critical habitat. And as previously noted, the Lynx Amendment does not require actual documentation that regenerating forests are dense enough to provide winter snowshoe hare and winter lynx habitat; these could in fact be "sparse forests" which are avoided by lynx (Holbrook et al. 2018).

The Lynx Amendment has no standard for the amount of mature forest habitat that was reported for high quality lynx habitat. This reported level is 49-58% in the home range and core habitat, respectively (see above summaries).

The Lynx Amendment has no standard for sparse forests in high quality lynx habitat. This is reported by the current best science as from 23-26% in high quality lynx home ranges and core habitat, respectively (see above summaries).

5. The Lynx Amendment cannot accurately define project impacts on lynx and lynx critical habitat; the agency's assumption that this project will have no significant adverse impacts on the lynx, based on assessment of impacts via the Lynx Amendment, creates a severely misleading conclusion; the use of the Lynx Amendment results in a failure to identify how lynx habitat will actually be impacted by the Round Star Project, in violation of the NEPA, the NFMA, the APA, and the ESA; use of the Lynx Amendment to manage lynx and lynx critical habitat will promote lynx extinction, not conservation as is required by the ESA and Flathead Revised Forest Plan.

It was difficult to determine how the Round Star Project will impact lynx habitat, since habitats to be treated were not defined by the current best science. So actual impact of the project on lynx habitat and lynx critical habitat was not accurately provided in the agency's analysis. However, the agency determined that no significant adverse impacts will occur as a result of the proposed treatments in lynx habitat and lynx critical habitat, as an Environmental Assessment (EA) rather than an Environmental Impact Statement (EIS) was completed for the project, based on a claim that the project would not create any significant environmental impacts. This claim of no significant impacts is based on a NEPA violation, or a failure to take a "hard look" at project impacts to lynx. A hard look was not taken because impacts to lynx habitat and lynx critical habitat as defined by the current best science was not used for the analysis.

There are some indications, indicators ignored by the agency, that the Round Star Project will have significant adverse impacts on lynx and lynx critical habitat. The project will create an undefined acreage of openings in lynx habitat and lynx critical habitat. However, the amount of openings to be created in lynx habitat and lynx critical habitat is 1,332 acres. This is the creation of 993 acres of openings in the Evers Reid LAU, and 339 acres of new openings in the Sheppard LAU (see Tables 50, 52, 53 in Project EA). As a result, the percentage of openings in lynx habitat and lynx critical habitat will increase from 1.4% to 11% in the Evers Reid LAU, and from 18% to 19.6% in the Sheppard LAU. Id. The existing condition for the Sheppard LAU already exceeds the 5% level found in high quality lynx habitat, which is a significant impact. This level will be increased with the proposed Round Star Project. For the Evers Reid LAU, the current 1.4% openings falls within the 5% level needed for high quality lynx habitat, but this level will be increased to 11%, which is over double the level needed for high quality lynx habitat. Thus the proposed project will exacerbate unsuitable conditions, or create new unsuitable conditions, for lynx habitat and lynx critical habitat. This demonstrates that this project will have cumulative significant adverse impacts on lynx.

Within the Round Star Project Area, there are currently 5.8% openings, while planned openings will increase to 14.8% (Project Record Q-13, Table 3). The amount of openings within lynx habitat, currently or planned, in the project area is unknown.

The current level of mature forest within the Evers Reid and Sheppard LAUs is reported as 36% (3,716 acres) and 9.6% (2,106 acres), and the project will reduce these to 33.7% (3,481 acres) and 8.4% (1,848 acres), respectively (EA table 50, 52 and 53). It is possible that other categories of habitat as per the LAU definitions also contribute to mature forest habitat, but this could not be determined. As previously noted, the recommended level of mature forest habitat in high quality lynx habitat is 49% to 58% in the home range and core areas, respectively. Thus there appears to be a significant deficit of mature forest habitat in the LAUs to be impacted by the Round Star Project.

There is also a deficit of mature forest habitat within the Round Star Project Area. Project document Q-13, Table 3, shows that the project area has only 23% mature forest (6,801 acres), which will be reduced to 6225 acres, or 21%, by the project. When added to late seral forests in the project area of 3.9%, the total mature forest habitat in the project area is approximately 27%. This is roughly half of the level found in productive lynx habitat. The level of mature forest habitat within lynx habitat and lynx critical habitat in the Round Star Project Area is unknown.

It is clear that based on the apparent lack of mature forest habitat in the Round Star Project Area, that significant adverse impacts to lynx and lynx habitat already exist. This is largely due to past logging. Appendix B of the project EA, Table 57, shows that 17,730 acres of the project area have had vegetation management activities since the 1960. These include the Round Bug, Salish Good, Logan Creek, and Sheppard Salvage timber sales, some which were only recently completed.

It is clear that the Round Star landscape is already of marginal value to lynx, including the critical habitat, due to what is likely a high, unsuitable level of openings, and a low level (also unsuitable) of mature forest habitat. Although it is not clear exactly what these lynx habitat conditions currently are in the Round Star Project area, or what they will be once the project is implemented, it is clear that the level of vegetation disturbance in the 22,074 acres of Forest Service land in the project area is much too extreme to be compatible with lynx use. All the recently completed timber sales, as well as those that date back to the 1980s, would still have avoidance responses from lynx; these units would have occurred roughly in the last 40 years or less, which is within the 43 year disturbance period measured by Holbrook et al. (2018). This would comprise 10,830 acres (EA Appendix B Table 57). Assuming that approximately half of these existing treatment acres were in lynx habitat/lynx critical habitat, which appears to be roughly half of the Round Star Project area as per Figure 2, project file report Q-2, (one half of the Forest Service lands in the project area of 22,074 would be 11,037 acres), this would be an existing 5,415 acres of lynx habitat that is being at least partially avoided by lynx (Holbrook et al. 2019). The proposed treatment acres

include at least 5,114 acres of lynx critical habitat (Project EA at 73, also Table 55 at 79). When added to the estimated disturbed acres of lynx critical habitat of 5,415 acres, a total of 10,529 acres of lynx critical habitat in the Round Star Project area would experience some level of avoidance by lynx. This would be 95% of the current critical habitat in the Round Star Project Area.

Although it is only an approximation that 95% of lynx critical habitat that exists in the Round Star Project Area will have various avoidance levels by lynx when the project is implemented, every vegetation treatment will be avoided for at least 10 years (Holbrook et al. 2019). As the project is implemented, some of the existing treatment areas that are being avoided may also recover more lynx use due to time. This approximation is the only assessment available in regards to project impacts on lynx, as the Forest Service did not evaluate avoidance impacts created by vegetation treatments. What is clear is that the Round Star Project will have extremely adverse impacts on lynx habitat values, at least due to a loss of habitat connectivity due to avoidance of vegetation treatments. Habitat connectivity created by mature forests has been identified as the key factor in defining lynx productivity (Kosterman et al. 2018, Holbrook et al. 2019). The severe loss of habitat connectivity in the Round Star project area, when added to existing vegetation treatments that are at least partially avoided by lynx, will clearly make this critical habitat unsuitable for female lynx as breeding habitat.

This level of habitat that is avoided by lynx would clearly make this landscape unsuitable for lynx occupancy, including critical habitat. In spite of these impacts, the agency claims habitat connectivity will be maintained at levels required for lynx conservation (draft DN), and that planned connectivity will not significantly impact lynx (no EIS required).

It is also clear that the Round Star Project will severely reduce habitat connectivity in both LAUs affected by the project. Although it is impossible to determine exactly how many acres of lynx habitat and lynx critical habitat will be impacted by the project due to a failure of the agency to clearly disclose this information,

including for the project area, one can at least identify that 5,114 acres of forage habitat in critical habitat will be impacted (Project EA 73, also Table 55 at 79). Although the Project EA at 73 also notes that 3,703 acres of denning habitat will also be affected, it is unclear regarding overlap with forage habitat effects; adding 3,703 acres of denning habitat to 5,114 acres of forage habitat produces 8,817 acres of impact, which is clearly incorrect as many of the proposed total treatment acres of 9,190 lie outside of lynx habitat (see Figure 3 in project file report Q-2).

Figure 3 in Project file Q-3 shows that the lynx habitat and lynx critical habitat in the Round Star Project Area is a contiguous block of landscape. The creation of 5,114 acres of travel barriers/avoidance areas within this undefined block of lynx habitat in the Round Star Project Area would likely have significant adverse impacts on lynx habitat and lynx critical habitat, an impact that was dismissed by the agency (failure to take a hard look at the creation of lynx avoidance areas). AS per Holbrook et al. (2018), lynx have been demonstrated to have significant avoidance of all vegetation treatments for at least the first 10 years after treatment, and up to 43 years for some treatments, including clearcuts. Significant avoidance would be measured by the time period it takes for lynx use of treated acres to reach 50% of untreated levels. Id.

As previously noted, there was no actual measure of how connectivity of lynx habitat and lynx critical habitat would affected by the Round Star Project. However, the agency's claim that it will be "maintained", as is required by the Lynx Amendment standard ALL S1, is clearly false, and in fact, is a violation of the Administrative Procedures Act (APA). Figure 3 of the Project file report Q-2 shows the level if impact on connectivity of lynx critical habitat that would occur from the Round Star Project. All treatment units will create significant avoidance by lynx for at least 10 years, and some up to 43. There is no basis for the agency claims that connectivity will be maintained. This absurd claim made by the agency is possible in part because the Lynx Amendment has no required measures of what constitutes "adequate connectivity" for lynx. Even riparian areas, which the draft DN at 77 says contribute to lynx connectivity, will be treated with the Round

Star Project. Project record Q-13 identifies that 10% of existing riparian habitat will be treated. This includes 593 acres in the outer RMZ, and 52 acres on the inner RMZ, for a total of 645 treated riparian areas. All these treatments will create avoidance by lynx for 10-43 years, and will not contribute to landscape connectivity for lynx.

The current best science shows that adequate lynx habitat connectivity in high quality habitat consists of roughly 50% mature forest and about 20% advanced regeneration forest (Kosterman et al. 2018, Holbrook et al. 2019). This would be roughly a 70% level of habitat connectivity. This should be the measure by which lynx habitat quality is measured in project NEPA documents. The measures of these 2 habitats in lynx habitat should ensure they are not actually sparse forests, which are avoided by lynx. It is clear that the critical habitat in the Round Star project area cannot meet these conditions; the limited connectivity that currently occurs, as acknowledged by the agency, will be largely eliminated with additional vegetation treatments as per the Round Star Project, exacerbating existing significant adverse impacts. Clearly the Forest Plan direction in the Lynx Amendment will not be met, as well as the requirements of the ESA to promote conservation of the lynx.

6. The proposed Round Star Project is a violation of the Flathead Revised Forest Plan (RFP) because the exceptions planned in lynx critical habitat for large openings do not provide for habitat that contributes to the long-term persistence of native animals, including the threatened lynx and fisher.

RFP Forest-wide standard TIMB-07 requires that the exception for openings over 40 acres may occur when it is determined these are necessary to achieve desired conditions, including providing for habitat that contributes to the long-term persistence of native plant and animal species. As we noted previously in this Objection, all openings are avoided by lynx in the winter, and large openings create movement barriers when they exceed the normal crossing distance by lynx. In addition, the current best science identifies that high quality lynx habitat, where kittens can be produced, has no more than 5% openings. The creation of

openings over 40 acres in lynx habitat will increase the likelihood that the 5% opening threshold will be exceeded.

This same problem that large openings will create for wildlife also applies to the fisher. Sauder and Rachlow (2014) reported that suitable fisher habitat has no more than 5% openings. And the current best science for both the fisher and the lynx recommend 50% mature forest habitat within their home ranges (Id., Kosterman et al. 2018, Holbrook et al. 2019). If the creation of large openings in fisher and lynx habitat eliminate this threshold of mature forest habitat, these openings will again be a violation of the RFP. The agency did not demonstrate that the large openings to be created in the Round Star Project will maintain 50% mature forest habitat in lynx and fisher habitat.

The RFP, Appendix C-70, states that the agency will analyze the potential fisher home range to see if it provides a combined amount of 50 percent mature and old-growth forest arranged in connected, complex shapes with few isolated patches; in addition, the agency will; research indicates that the probability of fisher will declines where open areas comprise more than 5%.

The level of openings in critical lynx habitat in the Round Star Project area and potential fisher habitat is unknown. The agency did not claim that large openings need to be created to improve long-term persistence of either the lynx or fisher.

The agency's rationale for creating large openings was summarized at the draft DN at 68, where it is noted that large openings assist in the goal of maximizing commercial and noncommercial treatments in the project area; with these larger-scale projects, it is important to treat as many acres as possible, due to the fact that another entry into the area may not happen for many years; maximizing treatable acres will give you the most comprehensive project that can be beneficial for years with minimal maintenance needed. This rationale clearly has nothing to meeting habitat needs for wildlife, including the lynx and fisher.

7. The management of lynx as per the Lynx Amendment does not require monitoring of lynx populations, which would demonstrate the effectiveness of the Lynx Amendment in actually conserving lynx; the only measure of population impact on lynx in the Lynx Amendment is an invalid proxy, where significant adverse impacts on lynx could be triggered, and exceed the allowed "take" of lynx as per the ESA, if the acres of exceptions and exemptions in the WUI are exceeded; at the same time, the Forest Service is not monitoring lynx populations, in violation of the NFMA, and so the only valid means of assessing the effectiveness of the Lynx Amendment is not being completed; the FWS has noted that the effectiveness of the Lynx Amendment up to 2017 is unknown.

The Round Star Project will use 1,830 acres of allowed exemptions/exceptions for lynx habitat on the FNF (draft DN 6). These exceptions/exemptions are to be subtracted from the total allowed on the FNF due to the 6% allotment in the WUI. On the FNF, there are 1,730,000 acres of occupied lynx habitat (Lynx Amendment FEIS, Appendix C Table C-1 at 453). A 6% allotment for exceptions and exemptions would be 103,800 acres. The Round Star NEPA analysis did not define the amount of exemptions/exceptions that have been used thus far by the FNF. However, it is clear that the 103,800 acres has not been reached in the 15 years since the Lynx Amendment was implemented in 2007. This trigger for significant impacts and exceeding "take" of lynx will clearly never be reached, and thus has no valid function.

The 2017 Species Status Assessment completed by the FWS repeatedly noted that the effectiveness of the Lynx Amendment is unknown, as is the population trend of the lynx (e.g., pages 3, 18, 21, 22, 36, 57, 107, 137, 143, 155, 158, 210, 213, 219, 222). Descriptions regarding the effectiveness of the Lynx Amendment to conserve lynx include "likely" and "uncertain." Actual monitoring of lynx populations in landscapes where the Lynx Amendment has or is being applied appears to be ignored by the agencies due to the use instead of the invalid "proxy" for lynx habitat impacts, or the 6% exemptions/exemptions, which includes both occupied and unoccupied lynx habitat that lie within the WUI.

Continued use of the Lynx Amendment for conserving lynx and their habitat, including critical habitat, is a violation of the NFMA, NEPA, APA and the ESA because effectiveness is highly questionable not only because of a lack of monitoring of either lynx populations or effectiveness of the Lynx Amendment to actually conserve lynx and their habitat, but as well, the current best science clearly demonstrates that the Lynx Amendment does not provide a valid measure of lynx habitat or impacts of vegetation treatments.

8. The Biological Opinion for the RFP, revised in February of 2022, is invalid because it based the assessment of plan implementation on lynx with the Lynx Amendment, blended with the vague, unmeasurable habitat descriptions developed by the FWS for lynx critical habitat.

The conclusions of the 2022 BiOp by the FWS for the impact of the RFP of the Flathead National Forest to conserve lynx and lynx critical habitat in invalid because it was in part based on the agency's implementation of the Lynx Amendment. This Amendment is the only conservation direction that actually requires several specific standards (no more than 30% openings, maintain habitat connectivity). The FWS definitions of lynx critical habitat are extremely vague, and there are no requirements for any level of the 4 habitats defined, including PCE1a, PCE1b, PCA1c, PCE1d, and matrix habitat. These habitats cannot be clearly measured due to overlap in habitat categories with the Lynx Amendment (see Table 51 in the Round Star EA, page 77). And even if they can be clearly measured, there are no criteria for any given level of these 4 habitats in lynx critical habitat. So there is no means of identifying when significant losses of lynx critical habitat would occur due to vegetation treatments. The FWS tries to combine their 4 habitat categories with those in the Lynx Amendment, but this does not provide a valid measure of lynx habitat or impacts, since the Lynx Amendment is not consistent with the current best science. The end result of the FWS's evaluation of project impacts on lynx critical habitat is that the level of "take" from the project falls within those allowed by the Lynx Amendment. So actual levels of "take" of lynx based on long-term loss of critical habitat is never

limited by the FWS, even in individual projects, such as Round Star. Although consultation is not completed at this time, we expect the FWS to conclude that the level of take of lynx and lynx critical habitat falls within allowed levels as per the Lynx Amendment.

9. The Round Star Project analysis of impacts on lynx habitat and lynx critical habitat is a violation of the NEPA.

There was no assessment of current or proposed openings in lynx habitat and lynx critical habitat in the project area, including comparison to the current best science to define lynx habitat quality. There was no description of the openings, including sizes, to be created in lynx habitat and lynx critical habitat in the project area. The actual treatments proposed for each type of lynx habitat was never defined, including what specific treatment was planned and how this would change that habitat structure to another structure. The project area lynx habitat and lynx critical habitat was not defined as per the current best science; habitat descriptions as per the Lynx Amendment were also not defined for lynx habitat and lynx critical habitat within the project area. The agency's defining lynx habitat and lynx critical habitat by LAUs instead of the project area makes it difficult for the public to determine specifically how the project will impact lynx habitat (direct impacts). There was no analysis of how current and planned roads would impact lynx based on traffic levels of over 8 vehicle trips per day. There was no description and analysis of all past activities in the 2 LAUs to be impacted by the project, in order to define cumulative landscape disturbances to lynx habitat and lynx critical habitat. There was no analysis of how the planned change in conifer species composition in the project area, including reductions of lodgepole pine forests, would affect lynx conservation as per the current best science. There was no quantitative analysis of existing or planned levels of habitat connectivity for lynx within the affected LAUs and within the project area. The agency defined the WUI in a manner that is inconsistent with the required criteria for a WUI as per the Lynx Amendment. There were no action alternatives that addressed public issues in regards to wildlife, including the lynx, where the current degraded quality of lynx critical habitat would be improved, not further degraded.

10. The exemptions/exceptions planned for lynx habitat and lynx critical habitat are a violation of the Forest Plan (Lynx Amendment) because the WUI was not defined as per the Lynx Amendment criteria, the criteria by which the 6% exemption was based on.

The WUI includes 89% of the project area. This was not defined by the criteria in the Lynx Amendment, however. As an example, Whitefish, which is 13 miles from the project area, was defined as a community at risk. Use of exemptions and exceptions for the Lynx Amendment requires that these be located within a valid WUI.

10. The exemptions/exceptions planned for lynx habitat and lynx critical habitat are a violation of the Forest Plan (Lynx Amendment) because the WUI was not defined as per the Lynx Amendment criteria, the criteria by which the 6% exemption was based on.

The WUI includes 89% of the project area (seer Figure 6, map of Round Star Project and WUI boundary, Project EA at 111). This was not defined by the criteria in the Lynx Amendment, however. As an example, Whitefish, which is 13 miles from the project area, was defined as a community at risk. Use of exemptions and exceptions for the Lynx Amendment requires that these be located within a valid WUI as related to the Lynx Amendment. The ROD for the Lynx Amendment at 20 states that the WUI evaluation was based on a mile of where people live (FEIS Vol. 1 page 1); based on this analysis they found that about 6 percent of lynx habitat is within 1 miles of communities. Communities are defined as an interface community, with more than 250 people per square mile, and an intermix communities, with a population density of 28-250 people per square mile. Due to an invalid delineation of the WUI for the Round Star Project, most if not all of the proposed 6% exemptions/exceptions are a violation of the Lynx Amendment, and as such, a violation of the RFP. Use of these exceptions/exemptions would require a Forest Plan amendment, which was not done for the Round Star Project.

II. The Round Star Project will trigger violations of the NEPA, the NFMA, the APA, the ESA and the MBTA across the Round Star Project Area.

The following list of various legal violations that will be triggered across the Round Star Project area and surrounding landscape are based on previous comments regarding Objectors issues and concerns as provided in the January 3, 2022 scoping comments, and the July 18, 2022 comments on the draft Environmental Assessment. This list of violations is also based on additional information that was provided in the draft Decision Notice, including response to comments, as well as additional project file information, information not available on the agency's

project web page. A special request was required by the public to obtain analyses information that was not available on the project web site. In order to avoid repetition of various information previously provided in the scoping and draft EA comments, the following generally includes only brief summaries of various issues, since a more detailed summary has already been provided. This summary of legal violations does include new information as per references as per published reports and/or research. These references are provided in Appendix A of this Objection.

1. The agency is violating the RFP direction for the Salish Mountains Geographic Area for grizzly bears. This landscape is supposed to promote connectivity of grizzly bear populations between northern and southern ecosystems. This landscape is required to provide habitat that can be used by female grizzly bears and allow bear movement between areas (GA-SM-DC). Habitat that will promote the use of female grizzly bears has been defined in Proctor et al. (2020), as no more than 0.96 miles of active motorized routes, and 60% core habitat, which requires a minimum size of roughly 2500 acres. The massive increase in motorized activity and fragmentation of cover proposed for the Round Star Project will not come close to meeting these requirements. Agency use of RFP direction that does not achieve the desired conditions is invalid.

2. The agency is violating the RFP direction to maintain connectivity in lynx habitat due to a failure to provide any quantitative measures as to current and planned connectivity of lynx habitat in the project area.

3. The agency is violating RFP direction FW-GDL-WL-DIV-05 by failing to mitigate disturbances on big game winter range; the claimed mitigation measure is that big game can still use undisturbed areas. This is not actual mitigation.

4. The agency is violating the RFP direction (PDF-WLD-14 to maintain thermal cover on deer winter range; canopy cover will be reduced to 50% in some existing thermal cover; the agency did not provide any monitoring data to

demonstrate that this is not a significant impact on thermal cover. If deer use is reduced as a result, this is not maintaining thermal cover.

5. The agency is violating RFP direction to maintain old growth stands; the agency failed to document via monitoring that the planned treatment of various old growth stands will not alter their quality for some wildlife associated with old growth.

6. The agency is violating the NEPA and the NFMA by using the minimum criteria as per Green et al. (1992) as the standard for old growth habitat, instead of using all the associated characteristics; the RFP and associated FEIS does not include any analysis as to why the minimum criteria as per Green et al. (1992) will maintain the 31 wildlife species associated with old growth on the FNF (USDA 2018); thus the old growth management direction will not maintain biological diversity. The measure for management of old growth by the agency is that the number of large trees will not be reduced by treatments (draft DN at 93, EA at 94). Large trees do not qualify as old growth as per the entire definition by Green et al. (1992).

7. The agency is violating the NFMA requirement to maintain biological diversity because roads are allowed to fragment old growth habitats, such as roads SO2, SO3, S11, S14, S19. Due to edge effects, the very limited amount of old growth in the Round Star Project area (4-7%) will be reduced further, affecting viability of associated species.

8. The agency is violating the NEPA by failing to provide a clear description of old growth in the Round Star Project area, so the actual level of old growth in the project area is unclear. The project file Q-13 states there are 1,107 acres of old growth (3.9%) in the 29,640 acres of landscape that includes the project area. However, the EA at 92 says there are 1,490 acres of old growth just within the Forest Service lands of the project area (6.8%) (21,980 acres).

9. The agency is violating the NFMA requirement to maintain diversity of wildlife because the RFP has no requirement for any old growth; as a result,

9. The agency is violating the NFMA requirement to maintain diversity of wildlife because the RFP has no requirement for any old growth; as a result, there is no requirement to increase old growth to levels required by wildlife. For birds, this is at least 20-25% (Montana Partners in Flight); for the pileated woodpecker this is at least 25% (Bull and Holthausen 1993); for the goshawk, this is 20% (Reynolds et al. 1992). These are minimum old growth levels required for wildlife. Historical levels of old growth in the Northern Rockies ranged from an estimated level of 20-50% (Lessica 1996). The Round Star Project will reduce old growth as well as what remains as recruitment old growth in late seral and mature forest stands. The project will treat 915 acres of mature-late seral forest habitat (EA 90).

10. The requirement of the agency to maintain elk security in the Salish Mountain Geographic area will be violated, as no Forest Plan amendment was completed to allow this violation. The agency claims that security will be maintained without any hiding cover, or with logging roads active within security areas, as these roads are not open to the public. There will be 1,725 acres of hiding cover within security areas removed (draft DN 7) due to vegetation, and 764 acres of security reduced by 6 miles of permanent roads constructed through security areas. Yet the draft DN at 6-7 says the agency will maintain security habitat. This claimed maintenance of security is only possible because the RFP does not define security habitat by the current best science. Hillis et al. (1991) defined elk security as contiguous blocks of hiding cover. And recent research by Lowrey et al. (2020) found that cover was selected as security by elk.

11. The agency will violate RFP direction for clearcutting (FW-STD-TIMB-04) that requires that the decision to clearcut forests be based on site specific conditions and desired conditions for other resources, including wildlife; the agency did not show by the proposed clearcutting in the Round Star Project will create a desired condition for any wildlife species, including Montana Species of Concern as the goshawk, pileated woodpecker, flammulated owl, black-backed woodpecker, and fisher.

12. The agency is violating the RFP by implementing exceptions for openings over 40 acres. FW-DCTE&V-04 requires that use of this exception will provided habitat that contributes to long-term persistence of natural plant and animals. There was no analysis in the RFP FEIS or the Round Star Project that demonstrated that the large openings will promote persistence of any wildlife species, including the goshawk (openings over 4 acres remove habitat as per Reynolds et al. 1992), the pileated woodpecker (no clearcutting is recommended in pileated woodpecker habitat as per Bull and Holthausen 1993), openings should not comprise more than 5% of lynx habitat (e.g., Kosterman et al. 2018, Holbrook et al. 2019), or more than in fisher habitat as well (Sauder and Rachlow 2014). As per the current best science (Hillis et al. 1991, Lowrey et al. 2020), large contiguous blocks of cover are required in elk security. Large clearcuts will severely limit the ability of a landscape to provide at least 30% elk security (Hillis et al. 1991). In addition, large openings will reduce the ability of a landscape to provide habitat for 31 old-growth associated species, and over 50 wildlife species associated with snags (USDA 2018) on the FNF. The majority of wildlife associated with snags require a snag to be located within a forest stand (Bull et al. 1997). The failure of the agency to evaluate the impact of large openings on landbirds in the FRP FEIS, or the Round Star Project, is also a violation of the MBTA. Currently, the long-term persistence of 67 species of western forest birds is a serious issue (Rosenberg et al. (2019), so the removal of old growth and forested snag habitat in large openings will likely exacerbate the ongoing decline of 64% of these 67 species of western forest birds. *Id.* In conclusion, any agency claim that large openings are consistent with persistence of long-term wildlife values, either in the FRP FEIS or the Round Star NEPA analysis, are arbitrary since no actual basis has ever been provided to date to demonstrate this is the case on the FNF.

13. The Round Star Project will violate the RFP direction, as required in FW-GDL-DIV-05 and 06 to reduce the risk of disturbances of nesting forest birds, as goshawks and flammulated owls, by stopping any management activities within 0.25 miles of nests. Since there have been no surveys of birds conducted for the Round Star Project, nesting locations, including for

goshawks, a Montana Species of Concern, are unknown. As a result, all proposed treatment units have been planned without the benefit of any such surveys. The agency claims that adequate surveys will be done later. This is as violation of the NEPA, because the public is not shown how coordination of vegetation treatments with wildlife, to protect nesting areas, is going to be done. As well, how this direction was implemented will never be provided to the public, as there is no further public involvement required once an objection is filed.

14. The agency is violating the NEPA by failing to provide the public with any information on the existing occupancy of the Round Star Project area by wildlife, including Montana Species of Concern, or species associated with old growth, such as the pine marten. The only baseline information provided to the public on the project area deals with vegetation. There was no discussion as to why baseline information on wildlife was not required by the NEPA. This is essential information, as it provides the public with basic information as to how past agency management of the project area has affected wildlife. The failure of the agency to provide this information is essentially a means of covering up any adverse impacts that past management actions have created on wildlife. At the same time, it is a NEPA violation because the agency is claiming that additional management will have no significant impacts on wildlife. Since existing impacts on wildlife from past management activities has not been defined to the public, it is arbitrary and capricious for the agency to simply claim, without any data, that additional management will not add to, or trigger significant impacts to wildlife.

15. The agency is violating RFP direction for management of riparian areas, or management areas 2b. The planned logging of riparian areas, including clearcutting, will have adverse impacts on wildlife, including the lynx and fisher, who the agency notes rely on riparian corridors for habitat connectivity. Management direction for 2b requires that it benefit other resources, including wildlife.

16. The agency is violating RFP direction FW-GDL-WL DIV 06 that requires the agency, if cover is lacking, to design projects to retain cover where it is lacking; connections of cover should not be severed. It is clear that the treatment of over 9,000 acres in the Round Star project area will impact connectivity of cover, including since existing connectivity was acknowledged by the agency to be limited. There was an analysis of connectivity in the project file (Q-13), which did not actually identify cover for wildlife, including big game and lynx. It was noted that past agency activities would have impacted many of these stands. On the other hand, this analysis claims that partial thinning would not reduce cover for wildlife, even though the current best science demonstrates otherwise (e.g., Kosterman et al. 2018, Holbrook et al. 2019). In summary, there was no demonstration by the agency in the Round Star Project as to how FW-GDL-WL DIV 06 was being met.

17. The agency is violating the RFP direction for the Salish Mountains Geographic Area by meeting the requirement that habitat security contributes to the Montana Fish, Wildlife and Parks objectives for big game populations regarding their distribution and hunting access. There was no analysis in the Round Star NEPA documents that defined specifically what the MFWP objectives are for this hunting district, if they are currently being met, and how the proposed project would change these based on the massive reduction of cover and huge increase in roads. There will likely be some level of illegal motorized activity on all roads, as well as increased hunter access on foot on these new roads. It is likely that this project will not contribute to MFWP objectives for management of elk in this hunting district, but this remains unknown due to a lack of analysis by the Forest Service.

18. The agency did not define how the standard for the Salish Mountains Geographic Area would be met, GA-SM-STD for no net increase above the baseline conditions of roads open to the public. The project will likely include expanded firewood harvest, as new roads can be opened to the public for 30 days in July and August. This may occur on the many new roads to be constructed for the project. As well, the use of these new and

existing roads supposedly closed to the public will be accessible to the public during logging operations, since these roads cannot be blocked with barriers, and gates are rarely closed during log hauling. Roads are considered open if only closed by a sign or order (RFP glossary). In addition, impassable roads require only these conditions the first 50-300 feet; the public could easily cross these short distances since motorized conditions would occur beyond those distances. Also, there will clearly be increased public motorized access due to illegal use. All these factors demonstrate that the creation of many miles of new roads will inevitably increase roads used by the public. These increases will impact the grizzly bear with increased mortality risk.

19. The RFP, and as applied to the Round Star Project Area, has no valid open road density controls because the agency claims that only public use on roads disturbs and displaces wildlife. As such, there was no analysis of motorized disturbances on wildlife in the Round Star Project, including for the grizzly bear. The RFP and Round Star Project NEPA analysis did not define why only public motorized activities disturbs and displaces wildlife. The Forest Service publication Christensen et al. (1993) clearly noted that any motorized use on roads displaces elk.

20. There was no analysis as to how all the new trails and roads to be constructed in a landscape that is supposed to promote connectivity for the grizzly bear will be impacted by expanded use by mountain bikers. As compared to existing conditions, increase trail/road access to mountain bikers will be significant. The agency did not define why these increases in access do not create significant adverse impacts to the grizzly bear, as well as impact elk security.

21. The agency is violating the NEPA by claiming that the Round Star Project will promote forest health. The RFP glossary defines good health as being free from insects and disease, or free from adverse impacts that impact the functional capability of the forest or tree. This requirement to achieve forest health means that snag habitat used by 52 species of wildlife on the

Flathead National Forest (USDA 2018) will be reduced/removed. The RFP definition of forest health, as implemented for site-specific project objectives, such as the Round Star Project, require removal of wildlife habitat. This definition is clearly a violation of the APA and NEPA.

22. The allowed active motorized route density in the Salish Mountains Geographic Area will create a negative growth rate for the grizzly bear, which is a violation of RFP direction.

23. The Round Star analysis did not complete the analysis required for the Salish Mountains Geographic Area for identifying forest stands that would provide old growth habitat for the fisher, or would provide the 50% mature forest habitat within a potential fisher territory.

24. The Round Star Project is violating the MBTA by failing to define how the project will impact migratory birds. This would include Montana Species of Concern that are associated with snags and old growth forests. We estimate that at least 38 bird species will be adversely impacted by the project. This impact was not addressed by the agency, even though a conclusion was made that there will be no significant impacts triggered from the project.

25. The RFP no longer restricts vegetation cover within elk security areas (draft DN at 71). So the RFP has no valid means of measuring project impacts on elk security as per the current best science (Hillis et al. 1991; Lowrey et al. 2020).

26. There was no analysis of elk habitat effectiveness in the Round Star Project, even though there will be extensive new road construction, and use of existing roads for logging and other treatments. The RFP has not ever provided any current best science to demonstrate only public motorized use displaces elk. The collaborative recommendations for elk management (USDA/MFWP 2013) cited research demonstrating that 2-4 vehicle trips per day are enough to displace elk, and as well, that elk displacement increases as the level of motorized traffic increases. AS such, it is not possible for a

logging project to not increase elk displacement and elk habitat effectiveness. It is likely that the Round Star Project will create significant losses of elk security, including below the minimum 50% level needed to manage for elk in a landscape, including where they are to be emphasized, as the Salish Mountains Geographic Area. The agency's failure to identify what are clearly significant adverse impacts to elk habitat effectiveness is a NEPA violation, as well as a violation of the APA, since claims that only public motorized use displaces elk are not supported with any science.

27. The Round Star NEPA analysis provided an unfounded conclusion (draft DN page 5) that the project will improve diversity and resilience for vegetation and associated wildlife. There was nothing in the wildlife report that identified any species that will benefit from the project.

28. The Round Star NEPA analysis claimed, without any documentation (draft DN at 6) that the project will create a better mosaic of different successional stages than existing currently for the lynx. There was no analysis provided to support this claim, and as we noted previously, the project does not measure impacts to lynx by the current best science.

29. The draft DN at 6 notes that is a need for unlimited administrative access on new roads for the project, yet this access is not identified as a significant impact on wildlife, including elk and the grizzly bear.

30. Appendix C of the RFP does not define why the definition of elk security was changed from page C-72, where it includes a requirement for cover, to C-73, where the cover requirement was dropped (draft DN at 71). The agency noted that the RFP does not require cover in elk security areas, but this contradiction in Appendix C of the RFP was never addressed.

31. There was no analysis in the Round Star NEPA analysis as to how many logging camps are expected to occur in the project during project completion, or how this will impact grizzly bears.

32. There was no analysis of cumulative effects of the entire landscape where the Round Star Project is planned. The project area includes lands owned by other agencies, where management activities are likely ongoing or planned. As well, there was no analysis of all the past, planned, and ongoing activities in the LAUs affected by the Round Star Project. As a result, the overall habitat conditions for lynx are not fully defined. If additional adjacent disturbances are planned within LAUs, the impacts of the Round Star project will be greater than reported. In addition, activities throughout LAUs affected by the project, as well as outside LAUs, will have relevance to grizzly bear use and dispersal through this connectivity area. Without any analysis of landscape projects, the agency planned the Round Star project regarding wildlife impacts in a void.