Data Submitted (UTC 11): 10/25/2021 11:00:00 AM
First name: Sara Jane
Last name: Johnson
Organization: Native Ecosystems Council
Title: Director
Comments: 1. Objector's names and addresses and telephone numbers
Lead Objector Sara Johnson, Director, Native Ecosystems Council

Mike Garrity, Director, Alliance for the Wild Rockies

2. Name and location of the project

Mid-Swan Landscape Restoration and Wildland Urban Interface Project on the Swan Lake Ranger District of the Flathead National Forest.

3. Responsible Official
Kurt Steele, Forest Supervisor

4. Appendices

This Objection includes 4 appendices. Appendix A includes relevant portions of the U.S. Fish and Wildlife Service's Species Status Assessment for lynx in 2017. Appendix B includes examples of lynx habitat recommendations from reports and/or publications. Appendix C includes brief summaries of several reports regarding snowshoe hare habitat. And Appendix D includes hard copies of literature and/or reports cited in the Objection.

5. Connection between Objection and prior written comments

NEC and AWR have provided scoping comments for the proposed project on December 21, 2018. In order to avoid repetition, we are incorporating these previously-submitted projects be reference. These comments addressed a variety of issues, including violation of the National Environmental Policy Act {{NEPA) due to numerous failures, including identification of cutting units, old growth stands, and completion of wildlife surveys, in which the results of surveys, and planned mitigation measures, would be provided to the public. We also noted that with a 15-20 year time line for the project, NEPA documents are "stale" after 5 years, and Forest Plan monitoring reports at 5-year reviews would not address the majority time-line of the project. We also raised a concern about the failure of the

Forest Service to use the current best science for management of occupied lynx habitat, to provide any monitoring data for the Northern Rockies Lynx Management Direction (NRLMD or "Lynx Amendment"), or as well, any information on lynx population numbers and trend in the Northern Rockies. We requested that the agency define lynx habitat by the current best science, and evaluate project impacts accordingly. We also requested that the agency evaluate project impacts on the snowshoe hare based on the current best science. We noted that the project will violate the Forest Plan standard for maintaining habitat connectivity in lynx habitat. We recommended that the agency amend the entire Lynx Amendment in a stand-alone programmatic amendment of the Forest Plan, along with an Environmental Impact Statement (EIS). We claimed that the agency is violating the Endangered Species Act (ESA) by not applying the current best science for lynx conservation, both in the Mid-Swan project area as well as at the Forest Plan level. We noted that there was no actual information provided on specific lynx locations in the project area. Other than lynx issues, we requested that the agency include a valid analysis of elk displacement from public lands, elk hiding cover as affected by the project, wolverine habitat use, including big game winter range, active motorized route disturbances on wildlife during project activities, and a through inventory of old growth and existing and planned levels of snag habitat in the project area. We were also concerned about the violation of the Wilderness Act by degrading wildlife habitat within Wilderness and Wilderness Study Areas by burning up habitat, including for the snowshoe hare, an important prey species for both the lynx and wolverine.

NEC and AWR submitted comments on the draft Environmental Impact Statement DEIS) on October 13, 2020. We are incorporating these comments by reference to avoid repetition. One of our primary concerns, again, was management of the lynx. This concern included amending the Forest Plan to drop standards for VegSS and VegS6. We noted that the project would eliminate vast acreages of snowshoe hare habitat, and thus reduce prey for the lynx, but this impact was never addressed. We noted that the project area is already severely degraded for lynx, an existing condition that was not identified by the agency, even though massive additional habitat losses are planned for lynx habitat, in violation of the ESA. WE noted that the proposed Forest Plan amendment did not meet the requirements

of either the NEPA or the NFMA due to a lack of analysis or explanation of the amendment rationale to the public, including that conserving the lynx requires massive logging intervention. Currently-occupied areas of the Mid-Swan landscape were not identified for protection for lynx. The recovery period required before lynx begin using silvicultural treatments was never included in the analysis of project impacts on lynx. We noted that advanced regeneration habitat important to lynx needs to be validated as having a high density of saplings,

instead of using age as a criteria. We challenged the DEIS claim that connectivity in the project landscape is high, as structural stage information contradicts this claim. We noted that the Lynx Amendment does not require a valid size of a female lynx's home range (roughly 13,500 acres), and thus allows washing out of lynx habitat features with the use of landscapes that exceed the normal size of a home range. We noted that the Lynx Amendment descriptions of lynx habitat are not consistent with the current best science, and as a result, cannot define existing or planned conditions as per lynx conservation. The Lynx Amendment has not been amended to incorporate the habitat standards for lynx identified by the current best science. The Forest Service did not address what the current status of lynx in the Northern Rockies is, which relates to the vulnerability of lynx to habitat disturbances as those proposed for the Mid-Swan project. The agency did not provide any data to support claims that logging and prescribed burning will improve lynx habitat. The analysis of project impacts on matrix habitat was misleading. The vast impacts on lynx critical habitat is a violation of the ESA, as these impacts will not be temporary with impacts on 65% of critical habitat. The agency did not evaluate the impact of motorized activity on lynx. The U.S. Fish and Wildlife Service did not use the current best science for their Biological

Opinion on Forest Plan direction for the lynx, which makes this BiOp invalid. There was no analysis by either the FS or FWS on the proposed permanent changes of lynx habitat quality by targeting reductions in lodgepole pine, a key tree species for lynx, and replacing it with larch, which has a much lower value to lynx, especially as winter forage. Again, we raised concerns about big game management, including displacement to private lands, and degradation of wolverine habitat by logging and burning big game winter ranges. And again, we raised concerns about treatments in Inventoried Roadless Lands as this will cause habitat degradation for both the lynx and wolverine. Finally, we raised concerns that the agency was violating the Migratory Bird Treaty Act by planning massive

alterations and degradations of the forest habitat most neotropical migratory birds in the Northern Rockies depend upon.

6. Relief Requested

Due to the violations of the NEPA, the NFMA, the APA and the ESA, NEC and AWR request that the proposed Mid-Swan project be withdrawn until the Forest Service and the Fish and Wildlife Service can develop valid, science[shy] based conservation measures for the Canada lynx, measures that will promote lynx conservation in the Northern Rockies as opposed to the existing direction in the Lynx Amendment that promotes logging and promotes extinction of this threatened species.

7. Legal violations Objectors believe the agencies will trigger if the Mid-Swan project and proposed Forest Plan Amendment are implemented.

A.The Forest Service and the U.S. Fish and Wildlife Service will violate the National Environmental Policy Act {{NEPA), the National Forest Management Act (NFMA), the Administrative Procedures Act {{APA), and the Endangered Species Act {{ESA) if the Mid-Swan Landscape Restoration and Wildland Urban Interface Project (hereafter "Mid-Swan Project") is implemented as planned and evaluated in the project Final Environmental Impact Statement, the project Biological Assessment, the Forest Plan Biological Assessment for the Canada lynx,

and the Forest Plan Biological Opinion for the Canada lynx.

1. The proposed Forest Plan Amendment for lynx habitat fails due to a lack of analysis and inconsistencies; the proposed amendment demonstrates that the Forest Plan direction for lynx is invalid, and needs to be amended at the programmatic level.

The agency claims that the Forest Plan direction for lynx, the Northern Rockies Lynx Management Direction (hereafter "Lynx Amendment") needs to be amended for the Mid-Swan Project because the agency wants to meet the current best science recommendations for the amount of stand initiation habitat in lynx habitat. This requires reduction of a key habitat component for lynx and snowshoe hares, or young regenerating forests. The agency acknowledges that the current best science for stand initiation habitat was not included in the Forest Plan. So the agency is abandoning the Forest Plan to use the current best science for stand initiation habitat.

The claims that the agency is abandoning the Forest Plan to use the current best science for stand initiation habitat is not actually true. Although generally concealed by the information provided in the project DEIS and FEIS, it is clear that stand initiation habitat will be reduced in LAUs that are currently below the level identified by the current best science (See Appendix B of this Objection). So the agency is providing a false rationale to the public for amending the Forest Plan.

The agency claims they are trying to meet stand initiation habitat recommendations of the current best science, but are not trying to use this same current best science for either early stand initiation habitat, or mature forest habitat. The early stand initiation structural stage will be increased, while mature forest will be decreased. There is no actual information provided as to what the landscape levels of these structural stages are, since almost 50% of the LAUs are not identified as per lynx habitat. Regardless, given that there will be a total of

121,258 acres of mechanical and burning treatments on the 174,000 Forest Service acres in the project area, with 70% of the landscape certainly eliminated as the mature forest structural stage defined by the current best science (Appendix B of this Objection), the Forest Plan amendment for Veg 56 is not being implemented to address the current best science for lynx.

The amendment will increase early stand initiation above levels recommended by the current best science (4-5%) in the Meadow, Porcupine, and Woodward LAUs. There are 7 LAUs that do not meet the current recommended level of mature, multistoried forests. All of these 7 LAUS will experience significant harvests of mature forest habitat.

There was no analysis of how the proposed treatments allowed by the amendment will impact lynx habitat use for the next 10 years, as well as in the future. As noted by Holbrook et al. (2018), there is almost a total loss of lynx habitat use the first 10 years after any silvicultural treatments. The agency did not address how this severe loss of habitat use for the 70% of the landscape that will be disturbed can result in long-term benefits to the lynx population.

The agency did not provide any actual analysis of the impacts to lynx from the proposed amendments. Instead, there were only claims presented that amending the Forest Plan direction for lynx may "potentially" improve lynx habitat functionality, and restore natural forest patterns and ecological processes, and may improve lynx habitat resiliency. None of these benefits were defined to the public in any quantifiable manner, which makes them meaningless.

The research branch of the Forest Service, Rocky Mountain Research Station, reported the exact opposite effects of logging on ecosystems, noting that untreated forest stands with bark beetles increased the resilience of the forest (Malcolm 2012). This report noted that bark beetle infestations provide a critical feature of ecosystems, structural complexity, as well as promote tree species

diversity by allowing increases in subalpine fir and spruce; with logging, lodgepole pine will continue to dominate these forests, to the detriment of forest complexity. Thus no logging lodgepole pine stands is a key conservation strategy for lynx and snowshoe hares, just the opposite of what the Flathead Forest is claiming. Without logging, pine beetle-infested lodgepole pine stands develop into optimum snowshoe hare habitat, which is a mixed conifer forest containing lodgepole pine for forage, and alpine fir/spruce for hiding cover (Holbrook et all. 2017a).

The amendment demonstrates that the Forest Plan lacks the direction needed to conserve lynx, and needs to be

amended to have standards for lynx structural stages based on the current best science. Since the agency believes that the Forest Plan direction for lynx does not improve lynx functionality, restore natural forest patterns and ecological processes, or improve lynx habitat resiliency, this Forest Plan direction clearly needs to be amended before it is applied to site[shy] specific projects on the Forest.

2. The Biological Opinion (BiOp) and the Biological Assessment (BA) for the Forest Plan direction for lynx as per the Lynx Amendment is invalid as per existing laws since these were not based on the current best science or any valid monitoring effects of its implementation.

Due to a lack of monitoring, neither the U.S. Fish and Wildlife Service (FWS) or the Forest Service (FS) have any basis to continue implementing the Lynx Amendment, as its effectiveness for lynx conservation is unknown. As per the Species Status Assessment completed by the FWS in 2017 (summarized in Appendix A of this Objection), there has been no monitoring of the effectiveness of this direction in conserving lynx. There is also no data on lynx population levels or trends. Trends do not look optimistic, since on of the 3 subpopulations of lynx in Montana, in the Garnet Mountains, is considered extinct, except for possible transients. The Seeley Lake subpopulation is also considered to be declining. The Lynx Amendment has been in effect since 2007, b but was based on a 2000

document by Ruediger et al. (2000), So in effect this lynx direction has been in effect for over 20 years without any monitoring. The proxy for lynx populations in the Lynx Amendment is invalid. It is the number of acres of lynx habitat removed via exceptions and exemptions. There is no tie to this measure to lynx populations.

And this 20-year old document has never been updated to include a considerable data base of new science (e.g., Kosterman 2014; Kosterman et al. 2018; Holbrook et al. 2017a, Holbrook et al. 2019) (see summaries of habitat recommendations from the current best science in Appendix B of this Objection). Even the document upon which the Lynx Amendment was only partially based on (only the 30% allowance of new clearcuts) noted that monitoring was required to determine if the Brittell et al. (1989) recommendations were valid. Also, the only

habitat standard in the Lynx Amendment, or 30% allowed for early stand initiation habitat, is 6 times more than reported by the current best science for both lynx home ranges and lynx core habitat. Added to this is the FWS's use of primary constituent elements, which have no relevance to lynx habitat defined by the current best science. As a result, it is impossible for either the FS or the FWS to provide a valid evaluation of vegetation treatment effects on lynx and lynx habitat, including for the Forest Plan direction for lynx, including critical habitat.

Also of note is that the FS only evaluates limited pieces of the landscape for lynx habitat and impacts of vegetation treatments. Only areas classified as "lynx habitat" are considered in any analysis of project impacts. For the Mid-Swan landscape, this means that half of the landscape is not considered in assessments of vegetation treatment impacts on lynx. Brittell et al. (1989), the document on which the 2000 management recommendations by Ruediger et al. (2000}} were based, required the entire landscape to be evaluated as per lynx habitat, including for every 640 acres. All of the current recommendations for lynx habitat (Kosterman 2014, Kosterman et al. 2018, Holbrook et al. 2017a, Holbrook et al.

2019) require the entire landscape to be managed for lynx, not just pieces.

The Lynx Amendment justifies this analysis of only portions of the landscape for lynx management in part by an unverified determination that snowshoe hare habitat occurs in only a few areas of the landscape, in older, multistory habitat, and in regenerating clearcuts (early stand initiation). To date, there has never been any analysis completed by the FS or FWS to support this rationale for managing only pieces of the landscape for lynx in areas snowshoe hares occur. To the contrary, recent research has demonstrated that snowshoe hares occur across 67% of landscapes In the Northern Rocky Mountains (Holbrook et al.

2017a). This is consistent with previous documentations of variable snowshoe hare densities based on forest structure (Squires and Ruggiero 2007; Holbrook et al. 2017a) (see Appeal Appendix C for details).

Because the Lynx Amendment only considers snowshoe hares on limited portions of the landscape, this amendment does not ever address the fragmentation impacts of vegetation management and prescribed burning on hares. For example, the Amendment does not address how prescribed burning will remove horizontal cover for hares at 0-3 meters from the ground, even though this is a critical feature for hares (Holbrook et al. 2017a). Nor does the Amendment address the high sensitivity of snowshoe hares to habitat fragmentation (e.g., Lewis et al. 2011, Walker 2005) (see Objection Appendix C for more details). The Amendment also does not identify the high value of lodgepole pine for snowshoe hares, in both the understory and overstory (Holbrook et al. 2017a). Lodgepole pine provides the highest level of nutrition to hares in comparison to other conifers, while larch has no winter forage value to hares as it is deciduous. The Amendment has no direction opposing the management emphasis, including in the Mid-Swan project, to replace lodgepole pine with larch.

The Lynx Amendment has no conservation strategy for snowshoe hares except protecting existing stand initiation and multistory habitat. There is no required level of these habitats for hares.

The FW clearly recognizes that the Lynx Amendment does not conserve lynx habitat. The Mid-Swan DEIS at 206 states that some core areas for lynx are being reserved from management to protect lynx habitat.

3. The FS has failed to complete a Forest Plan amendment for the revisions of lynx habitat structural stages, including those proposed in the Mid[shy] Swan project; the agency has also failed to complete a Forest Plan amendment for dramatically reducing habitat connectivity for lynx in the Mid-Swan Landscape, in violation of the Forest Plan.

As is noted in the Mid-Swan Project, the FS has changed the definitions of lynx structural stages in the Lynx Amendment to newer, more expansive definitions. These new definitions are "cross walked" to the current best science in Table 131 in the DEIS at 202-203. This clearly notes that the Lynx Amendment is not consistent with the current best science, and needs to be amended to be consistent with the new definitions of lynx habitat as per Kosterman 2014, Holbrook et al. 2017b, Holbrook et al. 2019, and Kosterman et al. 2018). The agency needs to complete public involvement and review of their new definitions for lynx structural habitat. For example, the agency claims that logging will maintain mature forest habitat (Project DEIS at 206), something that is not supported by the current best science.

The agency concealed the effect of the Mid-Swan Project on habitat connectivity for the lynx by using an index of connectivity instead of an easily-understood measure provided by the current best science. This science indicated that habitat connectivity, as provided by dense mature forests and dense young regenerating forests, was 86% in lynx core areas (Kosterman et al. 2018), 65% in lynx habitat (Kosterman 2014%), and 68% in Holbrook et al. 2018). These figures are remarkable similar to the habitat connectivity initially recommended in Brittell et al. (11989), over 30 years ago, which was 66% (denning, travel cover, and forage/thermal cover/stalkingcover). It is highly unlikely that even current conditions provide any habitat connectivity close to these levels, given the limited

amount of stand initiation and multi-story habitat in this landscape. And given that there will be 104,832 acres of mechanical treatments within the 174,000

FS acres of the Project Area (60% of the landscape), habitat connectivity could at best be only 40%, provided the untreated areas provide connectivity, which is unlikely. Thus the agency's claim that habitat connectivity will be maintained at recommended levels for lynx is clearly false.

The project area located in the Swan Mountains has been identified as a likely connecting corridor for lynx populations in adjacent landscapes. Thus not only is the agency required to provide accurate information as per adherence to the Forest Plan standard for maintaining habitat connectivity for lynx, but it is required to demonstrate that an important landscape function of the project area for habitat connectivity for lynx is being

addressed.

The agency did not address the avoidance response of lynx to habitat disturbances, in regard to maintaining habitat connectivity. Holbrook et al. (2018) documented that all silviculture treatments resulted in almost no lynx use for at least 10 years. And for heavier thinning, including clearcuts and selection harvests, recovery time to just half of the overall use level took from 34-40 years. This recovery time to about half of overall use over the study period was 20 years for more moderate thinning, such as improvement cuts and precommercial thinning. If lynx are generally avoiding 60% of the landscape due to recent disturbances, the Mid-Swan project will clearly result in dramatic habitat fragmentation for the lynx, which is a Forest Plan violation.

4. The FS failed to take a "hard look" at existing conditions for lynx and hares in the Mid-Swan project area, or to assess how the project would impact these conditions for both the lynx and their key prey species, the snowshoe hare.

As just one example of the failure of the Mid-Swan NEPA and ESA evaluations to define current conditions for lynx in the project area, there was no elaboration of the miniscule amount of high quality lynx habitat in this landscape. This core habitat was noted to be on 989 acres, which is 0.34% of the landscape. Given this severe lack of lynx habitat, the agency never addressed by additional degradation of habitat is needed even though it will likely result in complete extirpation of any lynx that currently use this landscape.

As is noted previously, the Mid-Swan FEIS did not evaluate the impact of the proposed project on lynx as per the current best science, including Kosterman 2014, Kosterman et al. 2018, Holbrook et al. 2017a, and Holbrook et al. 2019. All of these recent or current reports/peer-reviewed publications identify the habitat conditions that promote productivity of female lynx. There was no assessment of current conditions for lynx in the total Mid-Swan landscape, for any of the recommended levels of habitat, including openings, sparse forest, advanced regenerating forest, and mature forest, even though these structural categories of habitat have been extensively defined and validated for lynx conservation. Id. In addition, there was no analysis of project impacts on snowshoe hares, either for logging, fuels reduction, or prescribed burning activities. All these activities will impact either forest canopy cover, or understory cover from 0-3 meters above the ground {{Holbrook et al. 2017b), and thus impact snowshoe hare habitat. For silviculture treatments of 48,113 acres just in identified lynx habitat for Alternative B, this would impact 3,849 snowshoe hare home ranges, with an average size of a home range of 12.S acres {{Griffin 2004). The total treatment acres across the landscape include 104,832 of silviculture and fuels treatments, and 16,426 acres of prescribed burning, all of which will remove horizontal cover for hares either in the understory, overstory, or both. This total 174,000 acres of treatments would impact/eliminate 9700 home ranges for snowshoe hares due to the direct removal of dense cover patches, and the degradation of matrix habitat

{{Lewis et al. 2011, Walker 2005). Yet there is no analysis in the Mid-Swan NEPA documents as to how this huge loss of hare habitat could impact hares and thus lynx. As was noted in the 2017 Species Status Assessment by the FWS, only a small reduction in hare numbers/distribution could render a landscape unsuitable for lynx residency. What this level is, and whether or not it will be met with the Mid-Swan Project, was never addressed.