Homestead Project –EA Comment Synopsis May 19, 2020

Comments Log – EA Comments Received Based on February, 12- March, 13 2020 Comment Period

Cmt #	Name	Affiliation (if any)	City	ST
01	Tom Partin	American Resource Forestry Counsel	Portland	OR
02	Dan Martinsen	Benewah Shoshone Forest Health Collaborative	Wallace	ID
03	David Brummer	Stimson Lumber Co.	Coeur d Alene	ID
04	Brad Smith	Idaho Conservation League	Sandpoint	ID
05	Gary Macfarlane	Allaince of the Wild Rockies/ Friends of the Clearwater	Moscow	ID
06	Jeff Cook	Idaho Departmetn of Parks and Recreation	Coeur d'Alene	ID

Comment Synopsis

NEPA (1919.15, Chapter 25.1) requires that we review, analyze, evaluate and respond to substantive comments. The following table identifies substantive comments received during Homestead Project scoping, what action needs taken (if any), and the resource area with primary responsibility for the action(s) needed.

Comments may be paraphrased; before responding to specific comments, each comment letter should be reviewed in its entirety to ensure there is no loss of context. All letters are posted to the Homsestead Project SharePoint site.

Commenters 1-3 generally support the proposed action with comments. Commenter 4, agrees with the proposed action with some reserves. Commenter 5 does not support he proposed action

Comment #	Commenter #'s	Resource Specialist	Issue	Response
1			**Intentionally left blank**	
2	1, 2	Silviculture, Wildlife	Commenter supports treating treating in elk security acreages to create more early seral elk need for forage.	Many areas contributing to elk security in the Homestead project area are stands considered retention areas (see Homestead Retention Areas, VEG-023). Many stands are allocated to existing old growth or potential old growth. While the IPNF Forest Plan (2015) does allow for treatments in old growth, it does not authorize vegetation management activities that would likely modify the characteristics of the stand to the extent that the stand would no longer meet the definition of old growth (FW-STD-VEG-02). In order to create early seral conditions, even-aged regeneration methods would need to be utilized. Regeneration harvests would modify stand characteristics to the point that stands would no longer meet minimum criteria for old growth. Also, it is desirable to retain potential old growth stands. These act as replacement pools for existing old growth as disturbances/mortality induce structural changes and cause existing old growth to fall below the old growth minimum criteria. Additionally, some small portions are in the early seral condition (VEG-023, identified as past pruning treatments) while other areas contribute to Riparian Conservation Habitat Areas (RHCAs). Treating the remaining small number of acres in elk security would more than likely increase habitat fragmentation. Thank you for your comment, the project will increase both elk forage and elk security within the project units. Maps W-007 and W-11 show the Existing Mature Cover and the Post Treatment Mature cover, respectfully. These maps show the amount of elk forage that will be created by the vegetation treatments within the project area and benefits to elk forage in the EMU. Additionally to the timber harvest units, the prescribed burning will also enhance ungulate forage. The increase in elk security will come with the changes in road prescriptions. This will increase elk security in EMU 6-5 by 114 acres. See pg C-11 in the Wildlife Specialist Report. See Wildlife Report (pg 22, C-4, C-11) and Silvicultural report for additional information on elk and vegetation treatments.

3	1, 2, 5	Engineering	Commenter questions the need for road decommissioning. Specifically, carefully consider the following three factors when making a decision to decommission any road in the project area: carefully consider the following three factors when making a decision to decommission any road in the project area: 1. Determination of any potential resource risk related to a road segment 2. Determination of the access value provided by a road segment 3. Determination of whether the resource risk outweighs the access value (for timber management and other resource needs). Commenter believes that only those road segments where resource risk outweighs access value should be considered for decommissioning.	All of the roads in the project area are evaluated for current and future needs by the interdisciplinary team (IDT)~~.~~. Using the Transportation Analysis Process (TAP), the IDT identified needs and recommendations, compared these with risks, and then provided recommendations for road prescription. This included road access and improvement, road decommissioning, and short-term/long-term storage of system roads. The analysis and decision to implement the decisions from TAP were analyzed as required by the National Environmental Policy Act (NEPA). Please see the TAP report in Transportation.
5	1, 2	Operations, Soils	Commentors question the use of firm operating restrictions (restrictive logging methods). Request that the Forest Service shift methods of protection resouces during logging operations. Requests flexibilty in the EA and contract to allow for more efficient delivery to the mills for viability and economic benefit, and consider changing the wording to “steep slope mechanized harvesting will be allowed on slopes >40% if soil disturbance objectives are met”.	We agree that tethered-assist equipment is also becoming a more viable and available option for felling and yarding on steep slopes, our staff are evaluating the effects of this technology from neighboring forests at this time.
6			**Intentionally left blank**	

7 a-d	2	Silviculture	Commentor requests information on number of clumps and number of trees (per clump) in each regeneration unit with openings over 40 acres. While the desired species of western larch does fall into the mid-range on the percentage scale for overall composition, the western white pine increase is woefully short of the desired goals, in fact, the increase if any, is so insignificant that there is zero percent indicated in the post project table. The area contains a large amount of designated old growth. Was previously designated old growth reviewed to see if it still fits the designation? Is there opportunity to enhance the old growth characteristics making them more resilient in the face of wildfire? Will this increase the likelihood of high intensity fire in areas that may be prone mass failure already? Can there be room for some management/thinning in these areas, at least on the periphery where equipment can reach in without disturbing the old growth?	The proposed openings greater than 40 acres are generally comprised of multiple treatment units encompassing multiple regeneration methods (clearcut w/reserves, irregular shelterwood, seed-tree, and shelterwood) (VEG-001: Appendix A, Map 6, p. 37; Appendix C Forty Acre Opening Metrics, pp. 40-42). The number of clumps and number of trees in each clump will vary throughout the project area and are influenced by existing conditions. Within regeneration harvests, various levels of reserve trees would be left. In addition to the retention of individual trees (seed and shelter trees), reserve trees would be retained centered on existing large trees, snags, seeps, and other unique structural or habitat features, creating reserve areas. Additionally, tree retention would be utilized to fulfill Scenic Integrity Objectives (SIOs). The retention of individual and groups of trees would contribute to structural (vertical and horizontal) heterogeneity (Homestead EA, p.25). At a minimum, trees would be retained in order to meet Forest Plan snag retention/recruitment guidelines (FW-GDL-VEG-04 and FW-GDL-VEG-05) (VEG-001, p.25). Stands regenerated under the proposed action would be planted with a mix of western larch and rust resistant western white pine. Proportions of western larch and western white pine planted would vary and depend on pre-planting surveys, habitat types and site conditions. Therefore, stands post-treatment may be planted such that the dominance group could be classified as western white pine, not reflected in Table 7. For this analysis, stands were evaluated with a higher proportion being western larch, categorizing them in the western larch dominance group (Homestead EA, p. 21). See response to comment 52b regarding old growth verification. IPNF Forest Plan does authorize management activities in old growth (FW-GDL-VEG-01). FW-DC-VEG-03 states “Relative to other tree species, there is a greater increase in old growth stands that contain substantial amounts of one or more of the following tree species: ponderosa pine, western larch, western white pine, and whitebark pine.” It was determined that old growth stands in the warm/moist and subalpine biophysical settings lacked substantial amounts of shade intolerant species and that commercial thinning would not trend those stands to meet FW-DC-VEG-03.

8	4	Silviculture	Commenter recommends that the Forest Service consider applying concepts of "ecological forestry" proposed by Norm Johnson and Jerry Franklin. Their recommendations will mitigate some of the environmental effects associated with otherwise intensive regeneration prescriptions.	The IPNF utilized an approach like Johnson and Franklin (2009). The vegetation management approach that is being used in the IPNF Forest Plan is one of providing ecological components, patterns, and processes at multiple scales on the landscape, and thereby providing the full spectrum of habitats and conditions needed for all of the biological organisms associated with the various ecosystems (USDA 2013, p. 49). The IPNF utilized the concept of ecosystem ranges of variability or historic range of variability (HRV) to develop desired conditions. HRV analysis focused on forest composition, structure, landscape pattern, and process (disturbance and succession). The resulting HRV were found to be consistent with conditions that would improve resistance and resiliency under climate change. This resulted in the ranges for vegetation desired conditions by species and size class in the revised Forest Plan (USDA 2013, pp.49-51). Additionally, within regeneration harvests, various levels of reserve trees would be left. In addition to the retention of individual trees (seed and shelter trees), reserve trees would be retained centered on existing large trees, snags, seeps, and other unique structural or habitat features (Homestead EA, p.25). Additionally, tree retention would be utilized to fulfill Scenic Integrity Objectives (SIOs). The retention of individual and groups of trees would contribute to structural (vertical and horizontal) heterogeneity (Homestead EA, p.25). Existing snags which meet minimum snag requirements and do not pose a safety concern would be retained (Homestead EA, p.22). Coarse wood debris would be retained on the ground for sustained nutrient recycling in harvest units, consistent with FW-GDL-VEG-03 and FW-GDL-SOIL02 (Homestead EA p. D-9).

9	4	Silviculture	Commenter is an advocate of retention of 30% aggerate (pockets) of the original stand ranging from 0.5-5 acres. The commneter specificies amount retention of large trees, of snags, of course woody debris. The commenter states that Johnson and Franklin (2009) recommend that "foresters retain approximately 30% of the original stand in aggregates, varying in size from 0.5 to 5 acre The commenter suggests the retention of large trees utilizing age thresholds (all trees ≥ 150 years old regardless of species) or diameter limits (using diameters for old growth criteria in Green et al (2011)).	Aggregated retention would generally be applied, but not limited to, where the regeneration method is clearcut w/reserves. These areas would generally lack retained individual trees that would be present where the regeneration method is seed-tree or shelterwood. Aggregated retention may be utilized where seed-tree or shelterwood regeneration methods are used in order to capture unique structural or habitat features (including seeps, springs, and snags). Additionally, tree retention would be utilized to fulfill Scenic Integrity Objectives (SIOs), including "feathering" on unit boundaries. Design features associated with SIOs and tree retention can be found in the Homestead EA (Appendix D, p. D-8). The retention of individual and groups of trees would contribute to structural (vertical and horizontal) heterogeneity (Homestead EA, p.25). The retention of grouped trees would be influenced by the logging system, fuels reduction and site preparation activities. The amount of and size of grouped trees could exceed 30% of the original stand and may range in size up to five acres. Nowhere in the citation "Restoration of Federal Forests in the Pacific Northwest: Strategies and Management Implications" (Johnson and Franklin 2009) is this recommendation stated. The retention of large trees within the Homestead project area will vary among regeneration methods (clearcut w/reserves, seed-tree, shelterwood, and irregular shelterwood) and depend on existing conditions. The proposed action is intended to facilitate the successful establishment of long-lived, early seral, shade-intolerant species (Homestead EA, p. 21). The retention of all large trees of all species could require that trees be left in inappropriate areas and undermine the intentions of the proposed action. Such as in proposed clearcut units, where there is a lack of desirable early-seral, shade-intolerant species (e.g. western larch). The retention of shade-tolerant conifers (e.g. grand fir and Douglas-fir) throughout the overstory would act as seed-trees and could promote the establishment of these shade-tolerant conifers, not the desired condition. At a minimum, trees would be retained in order to meet Forest Plan snag retention/recruitment guidelines FW-GDL-VEG-04 and FW-GDL-VEG-05 (VEG-001, p. 25). Existing snags which meet minimum snag requirements and do not pose a safety concern would be retained (Homestead EA, p. 22). Coarse woody debris would be retained on the ground for sustained nutrient recycling in harvest units, consistent with FW-GDL-VEG-03 and FW-GDL-SOIL-02 (Homestead EA, Appendix D, p. D-9).

10	4	Hydrology, Fisheries,	Commenter recommends careful pre- and post-treatment monitoring of any riparian treatments to ensure that Watershed Condition Indicators are maintained or improved. The Forest Service should detail plans for improving these waterways and reducing temperatures for cold-water aquatic species.	There are no riparian vegetation treatments proposed. The details of stream and channel restoration work can be found (Marble restoration in the fisheries documents). In summary these projects would focus on adding structure (large wood) to Marble Creek, which would increase habitat complexity. Reducing temperature would be a minor, but would incrementally benefit Marble Creek by shade from large wood, narrowing the channel, and providing deeper pools.
11	4	Engineering, Operations	No newly constructed system roads or temporary should be built in riparian areas, particularly if those roads would cross streams.	Road layout attempts to avoid riparian areas and stream crossings. However, to meet the purpose and need there is a need for roads, and they sometimes cross streams and riparian areas. BMPs, such as perpendicular crossings, and designing proper drainage, limit the negative effects of these crossings. (Hydro) Every attempt is made to find alternate means, methods, and placement of temporary roads to avoid the construction of temporary roads in riparian areas or that cross streams. Newly constructed National Forest Service roads are constructed to ensure the proper drainage of the roadway, perpendicular crossings, limiting the impact to riparian areas, and reducing sediment and negative effects when crossings become necessary.

12	4	Hydrology, Engineering	Commenter remains concerned with the 4.0 miles of new roads proposed for construction in the Shearer Creek watershed. We urge the Forest Service to reevaluate the need to place these routes on the official system. Should the agency move forward with construction and closure as proposed, we recommend recontouring and closing the "front" or accessible road end for at least 300 feet to discourage unauthorized use and access.	The transportation analysis process is undertaken by an interdisciplinary team that evaluates at the long term impacts of the entire road system. The proposed new roads were determined to be the minimum number of miles to access the project area, while minimizing our overall footprint. Front end obliteration, or re-contouring the first 300 ft., is being considered for these roads. Page 12 of the EA states: "Approximately four miles of new road construction would occur with four new roads to facilitate the safe and efficient haul of logs from the proposed treatment areas." These four miles are not concentrated in Shearer Creek (EA Map C-4). Page 34 states: "The existing good condition of the aquatic habitat in Shearer Creek combined with the implementation of riparian zone buffers and BMPs should limit the amount of sediment generated from the proposed activities."
13	4	Engineering GIS	We encourage the Forest Service to check its calculation with regard to the total number of miles to be decommissioned. The EA text and Table B-9 state that the Total Proposed Action Miles for Unauthorized Route Decommissioning is 25.85 miles. We added the road segment lengths provided in Table B-9 and reached 24.77 miles, 1.1 miles less than reported.	GIS measures roads using a 'map distance' method, i.e. a two dimensional plane. Much of the data that we have for roads are determined from 'real world' measurements. These two systems are both used due to the needs of time and efficiency. We are constantly updating our GIS and data sets to present the most accurate representation of roads on the National Forest Lands. Due to this and some inherent rounding errors your comment has been noted and a correction will be made to the TAP report.

14	5	Team Leader	A comment letter was submitted on behalf of the Alliance for the Wild Rockies and Friends of the Clearwater. The entire letter was read and considered; however, it was difficult to identify project-specific, substantive comments for response, for a number of reasons. • The letter was 227 pages in length (the entire Homestead EA was only 57 pages and Appendices). • They incorporate their objection comments on the 2013 Forest Plan/FEIS and 2007 Northern Region Lynx Management Direction. • They include a list of 237 references (most of which were cited in their incorporated comments).	Their comments indicate a wide range of concerns – alternatives, Forest Plan direction and plan elements, snags, fire salvage, fire mitigation on private lands, watershed, soils, riparian areas, aquatic habitat, diversity, wildlife, access and recreation, inventoried roadless areas, wilderness, un-inventoried roadless areas, timber, social and economic systems, carbon sequestration and climate change, monitoring, scientific integrity, and cumulative effects. Unfortunately, they only loosely relate those concerns to the Homestead project and analyses (for example, by inserting the project name into their incorporated comment) and do not cite a single page number or specific location in the Homestead EA

15	5	Silviculture	The FS doesn't disclose the metrics the agency uses to measure resiliency, so that objective measures of resiliency can be applied to the Homestead project area by a scientist or any rational person now, immediately after the project is completed, and/or at later intervals. Page 36	When developing the goals, desired future conditions, objectives and standards in the revised Forest Plan that pertain to forest vegetation, the concepts and management approaches discussed in the KIPZ Climate Change Report (USDA 2010) regarding forest resistance and resiliency were utilized with the overall objective of maintaining and restoring the forests biodiversity and sustainability. The IPNF, regarding forest vegetation, considers that a resilient forest ecosystem contains the diversity of composition, size, density, and pattern to enable it to cope with disturbance and to perpetuate itself through periodic regeneration (USDA 2013, p. 90). The measurement indicators and analysis process are described in the Homestead Vegetation Analysis (VEG-001) on pages 6-10. The vegetation analysis compares existing vegetation conditions and the outcome of the proposed action to the desired conditions specific to the Homestead project area. A discussion on desired conditions can be found in VEG-001 p.10.
16	5	Silviculture	There is a lack of representation of early seral, shade-intolerant, drought and fire-tolerant, insect/disease resistant species dominance types (e.g. white pine, western larch, and whitebark pine)." What is the FS's empirical basis for specifying desired conditions for forest composition, forest structure, patch size, and associated landscape pattern? Is the data taken from the project area? If not, is it taken from the IPNF? If not, from where? Page 7???	A historic range of variability (HRV) was developed to determine historic conditions and provide context for building the vegetation desired conditions for the Forest Plan. The Technical Report for the AMS for the KIPZ Forest Plan Revisions (USDA 2003) contained preliminary information on HRV for the IPNF. This report defined the HRV as the range in variation in spatial, structural, compositional, and temporal characteristics of ecosystem elements as affected by minor climatic fluctuations and disturbances. This range is measured using a reference period prior to intensive resource use and management. The HRV is the baseline for comparison with current conditions to assess the degree of past change. Historic ranges for dominance type and size class were developed at both the forestwide scale as well as for each of the three biophysical settings. Landscape pattern was assessed by geographic area and at the forestwide scale (USDA 2013, p.50).

17	5	Silviculture	The EA does not analyze and disclose the cumulative effects of past, ongoing, and proposed management actions, within a logically defined cumulative effects analysis area, on land of all ownerships (page 7)	The spatial analysis area used to develop the existing forest vegetative conditions and to assess direct, indirect, and cumulative effects to forested vegetation includes portions of the Upper, Middle, and Lower Marble Creek sub-watersheds. The project area was used for all measures because it is large enough to assess effects to forest vegetation at the mid-scale landscape and fine scale (Homestead EA, p.19). National Forest lands provide for multiple use and sustained yield of products and services, including recreation, range, timber, watershed, and wildlife and fish purposes. Land outside the National Forest System (NFS) include lands owned by: (1) federal agencies other than the Forest Service; (2) state, county, and other agencies; (3) individuals and corporations; and (4) American Indian tribes. The Forest Service does not have the authority to regulate any activity or its timing on other lands. Management direction on these lands is not necessarily in alignment with the IPNF Forest Plan and its stated desired conditions. NFS lands administered by the IPNF are managed utilizing desired conditions and defined objectives, standards, and guidelines. The inclusion of lands outside of the Homestead project area would unnecessarily inflate the effects (amount of seedling/sapling size class and to a lesser extent the small size class) and not reflect the true effects of implementing the proposed action on NFS lands. The incorporation of lands outside of the NFS would limit the ability of the IPNF to achieve the desired condition for NFS lands, especially increased forest resilience (FW-OBJ-VEG-01).

18	5	Silviculture	is vital that the results of past monitoring be incorporated into this project analysis and planning. We request the following be disclosed: • A list of all past projects (completed or ongoing) implemented in the analysis area. • A list of the monitoring commitments made in all previous NEPA documents covering the analysis area. • The results of all that monitoring. • A description of any monitoring, specified in those past project NEPA for the analysis area, which has yet to be gathered and/or reported. • A summary of all monitoring of resources and conditions relevant to the proposal or analysis area as a part of all Forest Plan monitoring and evaluation efforts. •A cumulative effects analysis which includes the results from the monitoring required by the current and 1987 Forest Plans. Please provide an analysis of how well those past FS projects met the goals, objectives, desired conditions, etc. stated in the corresponding NEPA documents, and how well the projects conformed to forest plan standards and guidelines. (page 7-8)	Past activities, ongoing, and future activities are addressed in the Vegetation Cumulative Effects section of the Homestead EA (p. 28). A list (VEG-014) and map (VEG-021) of past vegetation activities can be found in the project record. Silviculture monitoring includes survival surveys and stocking surveys of past regeneration harvests. Reforestation monitoring data is compiled at the Regional level and can be found in project record (VEG-015). The Northern Region Stake Row analysis is comprised of first and third year staked row survival plantation surveys from National Forests in Region 1. Across Region 1, for the 18-year analysis period, the average first year survival ranged from 80-90% and third year survival from 60 to 80% (VEG-015, p.6). Idaho Panhandle National Forests Forest Plan Monitoring and Evaluation Report encompassing fiscal years 1988-2014 can be found in the project record (VEG-016). This report compares the end results that have been achieved to the projections made in the Forest Plan. The results of stocking surveys associated with harvested lands (compiled at the Forest level) show that over a 26-year time period, 97 percent of planted acres are currently satisfactorily stocked (VEG-016, p.10). Physical locations (GIS) of past stocking surveys can be found in the project record (VEG-013).

20	5	Enginerring, Silviculture, Weeds	Please disclose the location and acreages of past, current, and reasonably foreseeable logging, grazing, and roadbuilding activities within the project area. (page 8). No grazing currently, past?	There are no records of past grazing allocations, nor is there current or planned grazing in the project area. The location of past activities and associated acres with regards to silviculture may be found in the project record in map form (VEG-021) and as a GIS layer (VEG-013). Ongoing activities, as mentioned in the Homestead EA (p. 28) include firewood gathering and Christmas tree cutting. These activities do not occur in a static area, they occur throughout the project area at varying levels. The location of foreseeable silviculture activities, as stated in the Homestead EA (p. 28), would occur where the proposed regeneration harvests and planting activities are planned. The new construction of 4.0 miles of roads is clearly listed and noted on the map, in the EA, Appendix C4.

21	5	Silviculture	The EA states, "Forested landscapes that contain little heterogeneity promote the creation of large contiguous areas susceptible to bark beetles and other forest insects (Fettig et al., 2007)" as if that is a bad thing. Churchill, 2011 points out: Over time, stand development processes and biophysical variation, along with low and mixed-severity disturbances, **break up these large patches into a finer quilt of patch types**. **These new patterns then constrain future fires**. Landscape pattern is thus generated from a blend of finer scale, feedback loops of vegetation and disturbance and broad scale events that are driven by extreme climatic events. (Emphases added.) Churchill describes above the ongoing natural processes that will alleviate the vegetative imbalances alleged in the EA—without expensive and ecologically risky logging and road building. Page 11	The cited landscape pattern process described by Churchill (2011) is one associated with mesic forests (as defined in the Colville NF Forest Plan) that had a mixed severity fire regime <u>prior</u> to Euro-American settlement, within its historic range of variability (HRV). The Homestead existing conditions represent conditions after Euro-American settlement. Furthermore, Churchill recognizes 6 key categories, post Euro-American settlement, which altered mesic forests: grazing and fire suppression; selection logging; white pine blister rust; dispersed regeneration harvesting, fragmented ownership pattern; and large, high severity fires. Similar post settlement influences occurred on the IPNF. Lastly, Churchill describes 6 general principles, which can assist in restoring resilience in mesic forests: 1. Shift species composition towards early and mid-seral species 2. Increase total area and patch size of single story and multi-story old forests. 3. Increase total area of early seral ecosystems. 4. Manage for a range of conditions. 5. Heterogeneity allows for flexibility.

22	5	Silviculture/FID	Insects and diseases have always existed because, in addition to fire, this is how forests renew themselves. Please disclose the information you have on the baseline incidence of insect and disease infestation in this project area. Page 12	An analysis of pathogen and insect impacts in northern Idaho and western Montana by Hagle et al. (2000) examined successional changes for the period 1935 to 1975. This analysis shows that in 40 years, pathogens and insects changed forest cover types to more late-successional, shade-tolerant species on over 80 percent of the area dominated by moist forest habitat types (Byler and Hagel 2000) (USDA 2013, p. 65). To evaluate insect and disease activity within the Homestead project area, the Forest Health Protection (FHP) personnel utilized 2018 aerial detection surveys, ground observations, and root disease hazard (the potential loss from root disease) using Vegetation Mapping Program (VMap) spatial data (VEG-002). Additionally, stand reconnaissance was utilized in evaluating insects and disease and is documented in the project record (VEG-003). This information was utilized in the vegetation analysis for the Homestead project

23	5	Silviculture/ Climate	Please analyze how proposed management actions would be affected by likely climate change scenarios. Please quantify all human-caused CO2 emissions for all project activities. Please disclose how climate change has affected ecological conditions in the project area, and include an analysis of these conditions under climate change scenarios Page 12	Climate change predictions for the Northern Rockies generally forecast warmer temperatures and longer, drier summers. The proposed action would increase the representation of early seral, shade-intolerant, drought- and fire-tolerant, insect-and-disease-resistant tree species (e.g., western larch, blister-rust resistant western white pine and whitebark pine) (Homestead EA, p. 17). Climate change may initially affect survivability of planted seedlings. However, monitoring data suggest that within Region 1 between 1998 and 2015 the average first year survival of seedlings ranged from 80-90% and third year survival from 60 to 80%. During droughty years the third-year survival was slightly lower (VEG-015, p.6). Also, early seral tree species (e.g. ponderosa pine and western larch) have a unique ability to establish on bare soil surfaces where high surface temperatures exclude other species. One adaptation of these seral species is the deep rooting characteristic that allows the tree to find an adequate water supply and avoid extensive competition with shallow and fibrous rooted grasses and forbs (USDA 2013, p.120). Determining climatic conditions can be problematic due to the issue of scale. Even within a general area, different microclimates can be experienced by moving a mile or even a few hundred yards. Therefore, considering that climatic change is occurring on a global basis, it can be rather difficult to determine an appropriate scale. In most cases, the National Forest or Grassland is the most appropriate scale for analyzing greenhouse gas emissions, biogenic carbon, and their effects. Analysis at a smaller scale can result in inaccurate results because the carbon balance of an individual stand fluctuates cyclically over time between carbon emitter and carbon sink, depending on when natural or human disturbances have occurred to affect its development). The 9th Circuit Court of Appeals recently agreed with that reasoning, finding that a project of similar scope as proposed in the Homestead EA did not warrant detailed analysis of the project's potential impacts on climate change (Hapner v. Tidwell, No. 09-35896 (9th Cir. 2010) (Nishek 2019). The IPNF, in partnership with the Kootenai National Forest (KNF), completed a USDA Forest Service Kootenai and Idaho Panhandle National Forests Planning Zone (KIPZ) Climate Change Report (USDA 2010). This assessment on climate change for the planning zone synthesized the most recent scientific information regarding how future climate change may impact forest resources and disturbance processes on the IPNF and KNF (USDA 2010). Parts of this report are incorporated in the IPNF FEIS

				(USDA 2013), and where applicable, used to guide revised Forest Plan elements. The potential effects of future climate change scenarios on forest composition on the IPNF are explored in the KIPZ report (USDA 2010) and discussed in the IPNF FEIS (USDA 2013) on p. 68. The KIPZ Climate Change report also provides substantial amount of information on how terrestrial vegetation and disturbance processes can affect carbon cycles as well as forest productivity (USDA 2013, p.91).
24	5	Silvicutlure, Climate	Where is the cumulative effects analysis of IPNF carbon sequestration over time? Page 13 The FS fails to analyze an alternative projecting climate science into the forest's future. It fails to adequately consider that the effects of climate risk represent a significant and eminent loss of forest resilience already, and growing risk into the "foreseeable future. Page 23	Carbon sequestration was identified during Forest Plan revision as a key indicator associated with the vegetation revision or 'need for change' topic (USDA 2013, p.5). Carbon sequestration was incorporated into all alternatives considered for the IPNF revised Forest Plan (USDA 2013, p.38). A discussion on carbon sequestration can be found on page 91 in the affected environment section and on pp. 113-115 in the environmental consequences section of the IPNF FEIS (USDA 2013). The KIPZ Climate Change Report (USDA 2010) compiled and synthesized scientific information on past and projected trends in regional climate and climate-related impacts to forest resources. Possible management options to reduce ecosystem vulnerability to climate change are presented in the report as are options for increasing ecosystem resilience to both climate and non-climate stressors. When developing the goals, desired future conditions, objectives and standards in the revised Forest Plan that pertain to forest vegetation, some of concepts and management approaches discussed in the KIPZ Climate Change Report were incorporated regarding forest resistance and resiliency were utilized with the overall objective of maintaining and restoring the Forests biodiversity and sustainability (USDA 2013, p.90). The potential effects (and uncertainties) that climate change may have on forest vegetation on the IPNF are summarized in the KIPZ Climate Change Report (USDA 2010).
25	5	Silviculture	The EA doesn't address the question of how lands were determined to be suitable for the type of management ongoing or proposed. Please cite the specific documentation which determined that areas proposed for logging are suitable for timber production. We want to know when and how his was determined. Page 31	Timber suitability is determined at the Forest Level. The methodology and analysis process to determine timber suitability is in the IPNF FEIS (USDA 2013) pp. 564-565.

25	5	Silviculture	The EA does not disclose restocking monitoring data and analysis. Page 31	Please see response to Comment #18
26	5	Silviculture	Please disclose the body of science that implicates logging activities as a contributor to reduced carbon stocks in forests and increases in greenhouse gas emissions. Page 32	For at least the short-term, on site carbon stocks would be lower under the proposed action. The amount of carbon stocks retained would be influenced by seed-trees, shelter trees, and reserve areas. Actions such as those proposed under the Homestead EA may, in some cases, increase long term carbon storage (Finkral and Evans 2008; North et al. 2009; Mitchell, et al. 2009) but current research in this field shows highly variable and situational results (McKinley et al. 2011; Mitchell et al. 2009; Reinhardt and Holsinger 2010; Ryan et al. 2010). The proposed stand vegetation and fuel reduction treatments would reduce existing carbon stocks and temporarily reduce net carbon sequestration rates within treated stands, in some areas possibly enough that for the short term the stands would emit more carbon than they are sequestering. These stands would remain a source of carbon to the atmosphere (or weakened sink) until carbon uptake by new and remaining trees again exceeds the emissions from decomposing dead organic material. As stands continue to develop, the strength of the carbon sink would increase then gradually decline but remain positive (Pregitzer and Euskirchen 2004). Carbon stocks would continue to accumulate, although at a declining rate, until impacted by future disturbances (Nishek 2019).

27	5	Silviculture	If the FS has any sources of data **from the project area or IPNF** that determine the historic range of structural distribution at the landscape scale for western white pine, ponderosa pine, western larch, and whitebark pine please cite them. Also, please disclose the **project area** HRVs of tree species that are alleged to be more resistant and resilient (such as western larch, ponderosa pine western white pine and whitebark pine.) In doing so, please use metrics such as sizes and ages of trees, acres "dominated by" all those tree species, tree densities, canopy layers, and patch sizes. Please cite your sources of information for establishing these baseline/HRV numbers. Page 34	A historic range of variability (HRV) was developed to determine historic conditions and provide context for building the vegetation desired conditions for the IPNF Forest Plan (USDA 2015b). To complete the HRV and analyze current conditions, the KIPZ chose the following three ecosystem characteristics to quantify and describe: • Composition (Dominance type or species composition) • Structure (Size class) • Landscape pattern (Fragmentation) Historic ranges for dominance type and size class were developed at both the forestwide scale as well as for each of the three biophysical settings. Landscape pattern was assessed by geographic area and at the forestwide scale (USDA 2013, p. 50). The HRV analysis used a wide variety of sources and methods to assess historic conditions. These sources are listed in the IPNF FEIS (USDA p. 50).
28	5	Wildlife	The EA does not analyze or disclose the cumulative impacts of poisoning gophers. Page 36	Past project analysis has shown that the poisoning of gophers on the forest present little to no impact on non-target wildlife species. This was analyzed and addressed in several past decisions (Charlie Preston EA, Bussel 484 Gopher Control, and the St. Joe BA for the Pocket Gopher Control Project). The species and gopher control methods do not differ from what was proposed in the Homestead treatments, therefore there was no need to analyze the effect for this project.
29	5	Soils	After Homestead project activities, how many acres will not meet forest plan guideline FWGDL-VEG-03 after the project is completed, with their implications for long-term soil productivity? Page 39	Coarse woody debris retention is a guideline in the IPNF Land Management Plan (FW-GDL-VEG-03 and FW-GDL-SOIL-02) for the purpose of maintaining soil productivity and function. The retention recommendations in the LMP are adapted from research by Graham and others (1994). These retention recommendations are incorporated into project implementation via a required contract provision. After activities are completed, all treatment units shall meet the LMP requirements for CWD retention.

30	5	Soils	The soil “disturbance in these units is in the form of legacy skid trails (is) so extensive in these units that it is reasonable to conclude that the proposed harvest would not expand the footprint of disturbance.” That doesn’t sound reasonable at all. If the existing DSD is 100% we might agree. But your math doesn’t add up. Page 40	The conclusion that the proposed activities would be limited to the existing footprint of disturbance was drawn by incorporating 2 pieces of information: 1) the comparison of the extent of existing disturbance to the amount of disturbance that might be expected from the proposed logging system (the math the commenter is referring to), and 2) the recon forester’s estimates of what percentage of skid trails are practically feasible for the purchaser to re-utilize. The forester estimates for the skid trail reuse is incorporated into the DSD analysis, and can be view in detail in the Project Record (SOIL-004 Analysis Tables).
31	5	Soils	The FS generally provides no idea of the degree of soil impacts in a project area—except for an estimate of a limited category (detrimental soil disturbance or “DSD”)—but only if a site happens to occur in a unit proposed for logging or burning under the project. Such a narrow view of the cumulative impacts on soils contradicts other FS policy and best available science. Page 43 Does this contradict FS policy??	Following Regional guidance outlined in a technical guide for the Approach to soils NEPA Analysis (2011), the treatment unit is identified as the appropriate geographic unit for soils analysis. "Because productivity effects are spatially static and productivity in one location does not influence productivity in another location, it is appropriate to spatially limit the geographic boundary to the activity area." A watershed analysis of soil disturbance for the Homestead project area would dilute the observable detrimental soil impacts that would cumulate due to the Homestead proposed action. In other words, if one was to expand the analysis area to the watershed scale, both previous harvests and large expanses of undisturbed ground would be included in the analysis. As the analysis tool is the spatial extent of detrimental soil disturbance, the detrimental soil disturbance would be masked by the large swaths of undisturbed or minimally disturbed forest. For this reason, an analysis that analyzes cumulative soils impacts at a watershed level are inappropriate and do not adequately describe potential impacts from Homestead Proposed Action.
32	5	Hydrology/Soils	Please provide an analysis of the hydrological implications of the cumulative soil damage caused by past management added to timber sale-induced damage in project area watersheds Page 46	Soils are not evaluated on a watershed basis because doing so would mask the site-specific effects we see in harvest units. Page 4 of the soil’s specialist report defines the soil analysis unit. Proposed road decommissioning and storage activities in the RHCAs would promote desired conditions. These may have short term effects due to increased turbidity and sediment delivery, but would provide long-term benefits by removing road/stream connections and obliterating some roads within the RHCAs (EA Page A-3).

33	5	Silviculture	Please provide a map showing the locations of all past logging units, including the intensity of the logging activities. Page 49	Geographical Information System (GIS) data associated with past logging activities (treatment type/date) can be found in the project record (VEG-013) in addition to being displayed in map form (VEG-021).
34	5	Soils	Please explain how your methodology for determining DSD produces statistically reliable data. Page 49	The DSD sampling methodology is described in greater detail in the Project Record (SOIL-006, SOIL-007, and SOIL-024 Homestead Soil Methodology). The field methods for the Forest Soils Disturbance Monitoring Protocol can be found in Volume I of the protocol (SOIL-006). Statistical validity of the Forest Soils Disturbance Monitoring Protocol is described in Volume II of the protocol (Page-Dumroese et al, 2009). The methodology to determine which units to prioritize field surveys is described in SOIL-024 Homestead Soil Methodology: "The existing condition of the soil is determined using past harvest records, aerial photography, GIS data, communication with other field personnel, and on-the-ground site visits. Not all proposed units are surveyed by soil staff, the process by which units are surveyed and data extrapolated is as follows. Proposed timber harvest units are prioritized before field work begins using several methods of assessing site history and existing disturbance. By using the FACTs database (which tracks Forest Service vegetation management activities), LiDAR bare-earth hill shade derivatives, and field notes from other field going personnel (primarily the recon forester), the soil staff is able to identify the units expected to have elevated soil concerns (high existing disturbance, potential wetlands, or areas of high mass failure potential) and focus field work in these high priority areas. Estimates of disturbance can then be extrapolated in the low priority treatment units by comparing LiDAR observations, soil disturbance information, and recon forester observations from units that have been surveyed. It is assumed that sites with similar history as well as similar field and LiDAR observations would have comparable existing DSD values. All units have walk through information regarding soils disturbance from observations of other forest service personnel. This method of field work is the most efficient given the time constraints of the soil staff as it reduces redundancy in field work for all field going personnel and allows the soil staff to focus resources in units with elevated soil concerns. "

35a	5	Soils	The EA doesn't provide enough detail to indicate the thoroughness of the surveys, including whether all sources of DSD were inventoried. Page 52	All disturbance observed is recorded in surveyed units, regardless of the source. See response to comment 34 for further survey methodology.
35b	5	Soils	Please disclose that the SQS methodology for "activity areas" inherently encourages gerrymandering areas not previously logged into project "activity areas", helping to artificially dilute the amount of effective DSD from previously logged units by creating a more favorable average.	Treatment polygons are drawn based on potential treatment areas that consider the silvicultural need to establish desirable stand structure as well as operational feasibility. Gerrymandering or the manipulation of polygons to artificially decrease DSD is not a practice of the IPNF. However, our survey methods have been used to identify potential treatment areas that would be unable to meet or trend towards the desired soil condition (IPNF LMP, 2015) should the vegetation treatment occur, and those areas would be subsequently dropped from consideration for vegetation treatments.
35c	5	Soils	Please disclose the levels of large woody debris in the project area following past management activities, in addressing your obligations to consider cumulative effects.	Coarse woody debris field data was collected in all units surveyed using the FSDMP. This data is located in the Project Record (SOIL-002 Field data and SOIL-004 Analysis tables). Additionally, the IPNF is required to adhere to FW-GDL-VEG-03 and FW-GDL-SOIL-02 which define CWD retention levels. These guidelines are met through silvicultural prescriptions, and a contract provision that requires the logging purchaser to leave these recommended amounts of CWD in the treatment units upon sale completion. Therefore, all treatment units would maintain recommended CWD levels upon considering cumulative effects.
35d	5	Soils	Please disclose if and how the IPNF has determined if management activities have reduced the diversity of mycorrhizal fungi in any treatment area.	The IPNF does not collect or analyze site specific data that directly corresponds to mycorrhizal fungi. It is impractical to directly measure biological activity, including the diversity of mycorrhizal fungi. Data is collected for CWD in treatment units, and projects are design to retain recommended amounts of CWD as defined in FW-GDL_VEG-03. While not measuring mycorrhizal activity or diversity directly, the CWD is considered in the analysis and in project implementation to ensure adequate substrate for mycorrhizal fungi is provided, post-activity.

35e	5	Soils	Please disclose the effectiveness of DSD mitigation. Disclose the analytical data that supports proposed soil mitigation/remediation measures. There is no quantitative monitoring data that demonstrates DSD remediation activities have taken an activity area with DSD amounts over the 15% limit to an amount that no longer violates the standard	DSD recovery rates in response to rehabilitation activities (specifically decompaction activities) are derived from IPNF monitoring (Rone, 2011). In this we estimate an average of a 30% recovery rate in response to proposed rehabilitation, and this is included in the detrimental soil disturbance analysis (Project Record SOIL-003 Analysis Tables). To clarify, it is not the expectation of the IPNF that the rehabilitation of legacy skid trails in units currently exceeding the 15% DSD threshold would result in a soil condition that is 15% DSD or less. The expectation is that the rehabilitation work in these units would trend the soil condition towards the DSD standard. This is allowable within the regional soil quality standards (FSM 2500 R1 Supplement, 2014) which states "In areas where more than 15 percent detrimental soil conditions exist from prior activities, the cumulative detrimental effects from project implementation and restoration should not exceed the conditions prior to the planned activity and should move toward a net improvement in soil quality." This is also allowable within the IPNF LMP, which states in FW-DC-SOIL-02 "Soil impacts are minimized and previous activity areas that have incurred detrimental soil disturbance recover through natural processes and/**or restoration treatments**".

36	5	Weeds	Please disclose the impact of the Homestead project on noxious weed infestations and native plant communities. Page 56 The EA acknowledges that noxious weeds are an issue, where the analysis on how weed populations may effect is improved forage. Page 92	Impact to non-native, invasive species, from Homestead Weeds Analysis (p. 14): "The Proposed Action would directly and indirectly increasing the risk of weed introduction and spread. Effects to weeds from the Proposed Action are primarily indirect and cumulative, rather than direct. The proposed activities would likely increase the potential for existing weed populations in the project area to expand away from their current locations (e.g., roads, trails, trailheads, concentrated recreation areas) into adjacent treatment areas (where regeneration harvest, new road construction, or broadcast burning is proposed). The degree of disturbance caused by project activities also increases the risk of introduction of new weeds being introduced to and becoming established in the project area, especially in view of the predominance of regeneration harvest and ground-based logging, as well as the 40+ acre openings. When considered together with past, present, and reasonably foreseeable activities, the overall cumulative effects of the proposed project in the short term are expected to represent a moderate risk of the introduction/ establishment of new weed species to the project area and a moderate-high risk of the spread of existing weed infestations." Regarding forage, the regeneration harvest and subsequent burning proposed for 1,170 acres would likely convert these units to early seral state (p. 12 of Homestead TES Plants Biological Assessment/ Biological Evaluation), which would have the result of increasing forage (herbaceous forbs and graminoids) in the short term for wildlife (there are no grazing allotments in the project area). Impact to native plant communities, from Homestead TES Plants Biological Assessment/ Biological Evaluation (p. 14-15): "Because no suitable habitats for the two threatened species listed for the Idaho Panhandle National Forests, Water howellia and Spalding's catchfly, the Proposed Action would have no effect to these species (See Table 5, below). There would be no effect to endangered species, as currently none are listed for the Idaho Panhandle National Forests. Region 1 sensitive plants that occur only in cold forest, dry forest, wet forest, deciduous/riparian, peatland/meadows, and/ or aquatic habitat guilds would not be affected by the Proposed Action because these habitats are not present in areas affected by the proposed activities. Therefore … the Proposed Action would have no impact to the 19 sensitive species associated with these guilds (Table 5).

				"[W]hile the Proposed Action may impact some individual plants and habitat in the short-term, it will not likely lead to a trend towards federal listing or cause a loss of viability to the population of the 15 moist forest and 3 sub-alpine habitat sensitive species analyzed here (Appendices A and B). Taken together with the past, present, and reasonably foreseeable activities discussed above, in the short term, the Proposed Action would have moderate and low cumulative effects to sensitive plant species associated with the moist forest and sub-alpine guilds, respectively. Specifically, while the effects of individual proposed activities vary (Appendix C), the scale and intensity of effects associated with the 1,170 acres of regeneration harvest and 918 acres of ground-based yarding bring the overall effect to moderate. Finally, as discussed above, long-term beneficial effects to 2 of the 3 sub-alpine and 9 of the 15 moist forest sensitive species may be expected."
37	5	GIS, Hydrology	There are no maps in the EA or on the project website showing the extent of the Lower, Middle, and Upper Marble Creek (LMU) drainages apparently under analysis. Page 57 Get a map.	The extent of the Lower, Middle, and Upper Marble Creek drainages can be found in map form in the project record under GIS Map_001Homestead_Watersheds_LMU_Marble Creek_04162020.pdf .
38	5	Engineering, Hydrology	"27.8 miles of roads will be decommissioned reducing road generated sediment 20 tons annually." The EA fails to provide any basis for this sediment reduction. The EA doesn't make a firm commitment to actually carry out all the decommissioning described. Much decommissioning would be conducted on roads not used for logging activities, however the EA doesn't identify sources of funding for this decommissioning work. Page 57	As stated on page 30 of the EA, the Water Erosion Prediction Project model (WEPP): Roads model (Elliot, 2004) was used to estimate annual sediment erosion from roads. The documentation is available as a spreadsheet (Homestead_Decom.xlsx [https://usfs.app.box.com/file/554815276318]). Funding to carry-out this project will be secured once the Timber sale is finalized. Potential sources of funding include appropriated funds, KV funds, grants, and retained receipts from other stewardship contracts.

39	5	Fisheries	"Proposed aquatic habitat restoration in Marble Creek is intended to improve water temperature concerns by adding structures to create shading, pool scour to add depth and channel narrowing to improve overhead vegetative cover." Unfortunately, the EA doesn't make a firm commitment to actually carry out all the aquatic habitat restoration proposed or described. Since such work is not funded by logging activities, and there is no source of funding identified, there is no assurance the work would be completed, and therefore no assurance the analysis of effects is accurate. In regards to temperature in Marble Creek, the EA states a "TMDL (water quality improvement plan) has been developed for this segment." The EA does not demonstrate consistency with the TMDL. Page 58	Funding to carry-out any of this project is not secure. Potential sources of funding include appropriated funds, KV funds, grants, and retained receipt from other stewardship contracts. The Marble Creek restoration would be prioritized with several other important projects on the Forest. How it ranks for funding among projects is based on several factors including ecological cost:benefit, partners' interest and their ability to share costs. By getting the project through the NEPA process it becomes much more attractive to potential partners and ranks much higher for special initiatives. The TMDL targets shade. Riparian habitat conservations areas (RHCAs) retain shade, and the proposed instream restoration provides a small, but incremental step to securing more shade and narrower channels.
40	5	Fisheries,Hydrology	The proposed action would increase stream connectivity due to the replacement of a barrier culvert in Shearer Creek." Does the FS know how many road/trail culverts in the project area are likewise improperly designed or installed? If so, please disclose the number. Page 59	During project development all crossing of fish-bearing streams were evaluated for their ability to provide movement for fishes at various stream flows. Shearer was the only culvert that did not meet the passage evaluation. Also stream crossings were evaluated for their sediment contribution. Those that did not meet criteria were identified for BMP upgrades.

41	5	Fisheries	Please disclose the results of monitoring the Macroinvertebrate Assemblage Management Indicator Species. Page 60	Preliminary results can be found on page 72 of the PacFish / InFish Biological Opinion (PIBO) Monitoring Program (Archer et al. 2018[now in the PF as a hydro reference]). In summary the result is that Observed/Expected macroinvertebrate scores of managed sites versus reference sites was not significantly different.
42	5	Engineering, Hydrology	The EA fails to provide sufficient evidence or monitoring data demonstrating BMP effectiveness. Page 62	Best Management Practices are derived as a result of monitoring, audits, and research support the effectiveness of the design features established over years of trial and error. The reason they are used as 'Best' is that they are proven to work over multiple soils and diverse conditions and climates. Page 2 of the Hydrology Report cites Gravelle and Link (2007), for the effectiveness or RHCAs. Page 3 of the same report cites three other documents to support BMPs related to sediments originating from roads, Seyedbagheri 1996, IDEQ 2016, Edwards et al. 2016.

43	5	Fisheries, Hydrology, Engineering	Does the FS conduct annual monitoring of **ALL** drainage structures left behind gates and berms in the project area? The EA indicates that with roads put into storage, their impact on watershed function would be minimal, that roads would be stabilized and have a low probability of failure. How often does the FS conduct monitoring or inspection of each stored road in the project area? Page 64. Please disclose the existing conditions of site specific stream reaches and project effects on water quality, fish and other aquatic resources. Please disclose information regarding the existence and effects of bedload and accumulated sediment. Please analyze and disclose channel stability for specific stream reaches. Please disclose the amount of existing accumulated fine and bedload sediment that remains from the previous logging and road construction. Page 65	The Forest monitors road storage effectiveness on a subset of roads every field season. Monitoring indicates that the storage prescriptions employed are effective at minimizing impacts to aquatic resources. The Forest review the project area in detail and the site-specific reach that showed signs of accumulated sediment was intensively reviewed and documented in the EA on page 31 (Shearer Creek). Page 31 of the EA: To evaluate current stream channel stability, a modified Pfankuch (Rosgen, 1996, 2006b) surveys were conducted on Little Daveggio and Daveggio and a general stream survey on Shearer Creek. The modified Pfankuch evaluates the upper banks, lower banks, and streambed conditions. Based on this criterion, the modified Pfankuch rating ranged from fair to good (PF: HYRDO-002). As stated in the EA pages 34-36, there are existing good aquatic habitat conditions in Shearer, Daveggio, Little Daveggio, and Homestead Creeks. Page 29 also refers to the IDEQ reports that list these streams as fully supporting salmonid spawning, which is based on substrate composition
44	5	Operations,IDT lead	Please explain how the timber sale would comply with the Clean Water Act and all state water quality laws and regulations.	Forest Plan addresses CWA in FW-OBJ-WTR-02, and FW-GDL-WTR-01. Both are addressed in appendix A of the EA, and indirectly addressed in the hydrology section of the EA. State water laws are addressed by meeting the Idaho Forest Practices Act, and by meeting with the permitting agencies annually according the Non-point Source Water Quality MOUs [now in the PF for Hydrology].

45	5	Hydrology	Peak flows can be altered by forest harvest activities after removal of canopy through less interception, which results in more snow accumulation and snowmelt available for runoff (Troendle and King 1985). Please disclose the potential for the project to damage channel morphology and aquatic habitat. Please conduct an analysis of water flow alteration effects on stream bank erosion and channel scouring during spring runoff and/or rain-on-snow (ROS) events. Most segment altering and channel forming events occur during instantaneous flows. Openings accumulate much more snow than in a forested areas that are not as "open," thus provide a significant contribution to water yield especially during ROS and spring runoff events. The number, mileage and proximity of the roads to the proposed logging units and streams are important because they will also have a significant effect on peak flows and the resultant impact on fish, steam channels and possible flooding. Page 66	A combination of monitoring, audits, and research support the effectiveness of the design features, including BMPs. Page 2 of the hydrology report cites Gravelle and Link (2007), for the effectiveness or RHCAs. Page 3 cites three other documents to support BMPs related to sediments originating from roads.
46	5	Fisheries	Please disclose the results of surveys for native fish occurrence and abundance in project area streams. Page 68	Extensive field surveys for fish species composition and distribution have occurred over several years as part of various fisheries analyses. Data collected is available for review in the Fisheries project file (PF FISH 019). Idaho Fish and Game was also consulted for their knowledge of fish species distribution

47	5	Wildlife	The EA states, “Gray wolf, black-backed woodpecker, harlequin duck, and western toad have habitat or are suspected to occur within the Homestead project area but are impacted at an inconsequential level.” There is no analysis which supports this “inconsequential” conclusion. Page 71	See Wildlife Report (Appendix C)
48	5	Wildlife	Please provide an analysis for the Forest Plan MIS “Landbird Assemblage.” Please disclose the specific habitat needs of all of these bird species, and analyze cumulative impacts. Page 72	See pg 2-3 under “Focal Species” in the Wildlfie Report. The landbird assemblage was selected to aid in analyzing the effects of moving towards the desired conditions for vegetation. The landbird assemblage (Olive-sided Flycatcher, Dusky Flycatcher, Hammond’s Flycatcher, Chipping Sparrow and Hairy Woodpecker) were added as Focal Species to monitor integrity of terrestrial vegetation structure and function and are monitored at the Forest-level scale by the ongoing effort of the Integrated Monitoring using Bird Conservation Regions (Halka et al. 2017). The Idaho Panhandle and Kooteni NFs contracted with Ecosystem Research Group (ERG) to conduct an independent wildlife habitat analysis of the potential effects of the alternatives in the IPNF and KNF EISs for their RFPs. That analysis extended beyond the expected life of the Forest Plan. See the Wildlife Specialist report pg 2 “Focal Species,” IPNF FEIS MIS discussions beginning on pg 355 & 366 as well as the ERG report (p. 88-94) for additional species information.

49	5	Wildlife	The EA fails to include a cumulative effects analysis for species that are affected by human activity including the fisher, pine marten, wolverine, Canada lynx, native trout and other fish, elk, woodpeckers, pygmy nuthatches, northern goshawks, flammulated owls and other raptors, fringed myotis, Townsend's big-eared bats, amphibians (such as western toad and Coeur d'Alene salamander), and reptiles. The EA fails to consider best available science concerning biological relationships and population trends of these species on the IPNF. Page 72	See the Wildlife Report pg 13 (Fisher analysis) and Appendix C for discussion of additional species. Additional information can be found in the Revised Forest Plan EIS beginning on pg 175 "Aquatic Habitat/Species" and pg 209 "Terrestrial Wildlife".
50	5	Wildlife	Please disclose statistically robust estimates of population trends of each Sensitive species. Please disclose the intensity of surveys for Sensitive species that have been conducted in the project area. Please provide a sound scientifically-based explanation for any species' apparent absence from the project area. Page 73	Wildlife Report (Appendix C), explains any project level effects to sensitive species. Each Sensitive species analysis includes trend estimates, if available, in the wildlife report or the 2015 Forest Plan FEIS.If a species is absent from the project area, a rationale is included in Appendix C and is most often related to habitat conditions.

52	5	Silv	Please explain why none of the Homestead EA's analyses utilize the "Very Large" size class metric. Please disclose how many stands in the project area fall within that Very Large size class, and how many acres of those would be logged. Please estimate how many total trees > 20" dbh would be cut in each unit. Page 77 Please disclose how many of the 5,566 acres have been confirmed to meet old growth criteria, what methods were used to determine this, and how many acres are said to be recruitment potential old growth stands.	A basal area weighted diameter for stands is calculated (GIS attribute) as defined and stands are put into one of six size classes (encompassing the commenters "very large" size class) following the National Technical Guide (VEG-020, p. 67). Stand level size classes are available in the project record (VEG-013). The Homestead vegetation analysis of forest structure utilizes the four size classes associated with Forest Plan desired conditions (FW-DC-VEG-02, FW-DC-VED-11). The desired conditions for size class are the result of an HRV analysis and were found to be consistent with conditions that would improve resistance and resiliency under climate change (USDA 2013, pp. 50-51). Within the Homestead project area there are approximately 2,905 acres in sizes classes 20.0" dbh or greater. Of these, 59% are allocated to old growth, 8% allocated to potential old growth, 13% have no allocation and have not treatment, and 18% are proposed for treatment. Of the 18% proposed for treatment, 77% have identified root rot infections. The very large size class, as stated in the received comment, was used from the Spectrum model to project stand growth over the next 50 years under future climate scenario of warm/dry to estimate stands that would have structure similar to old growth (USDA 2013, p. 80. The Homestead old growth analysis uses reports and calculations generated from the web-based R1 FSVeg Reports and Utilities application. Old growth reports and calculations reported by Region 1 applications are based on the Region's old growth definition (Green et al, errata corrected, 2011). Stands that were allocated as existing old growth met old growth minimum criteria associated for their habitat type group and old growth type as defined in (Green et al, errata correct, 2011) at the time of inventory, with the exception of Ancient Cedar Groves (VEG-013). All calculations are based on the data collected at the time of inventory (VEG-020, p. 20). Field verification was not conducted for existing old growth since stands met minimum requirement at the time of inventory. Field verification would have the potential for removing stands, especially where inventory data is older, from old growth allocation due to tree mortality. Potential causal agents of tree mortality includes insects, disease, or weather-related instances. Potential old growth documentation can be found in the project record (VEG-011).

53	5	Wildlife	Please disclose the method used to model old-growth and mature forest dependent wildlife habitat amounts and the rate of error based upon field validation of its predictions. Please compare patch size of the old-growth areas to scientific information on minimum size needed for utilization by old-growth associated wildlife. Page 77	The Homestead Project did not propose to alter existing old growth. Please see EA Pg 27 "Old Growth." For additional information. In addition, old Growth is discussed in the "Vegetation" section of the FEIS and Homestead vegetation specialist's report. Old growth is also discussed in the individual species sections of the FEIS
54	5	Silviculture	Please disclose the best available science the IPNF uses to manage recruitment potential old growth stands. Page 79 Please provide an **estimate** of how much old growth in the project area has been destroyed by logging. Please disclose the historic levels of mature and old growth forest in the project area. How many FIA plots (locations in the project area) show the plot is old growth? Page 79	Draft guidelines have been developed for the IPNF with regards to recruitment of potential old growth and can be found in the project record (VEG-019). The IPNF Forest Plan 2015 does not authorize vegetation management activities that would likely modify the characteristics of the stand to the extent that the stand would no longer meet the definition of old growth (FW-STD-VEG-02). Regarding the historic range of variability of old growth on the IPNF, there is no way to accurately determine how much of the forest may have met the Green et al. (1992, errata corrected, 2011) definitions of old growth. In order to determine whether or not a forest stand meets those definitions, it requires detailed information on how many trees per acre exist in the stand over a certain diameter and age, the total stand density, the forest type and lastly, the habitat type group that the stand occupies. No historical information exists that can provide that level of detail. Therefore, a numeric desired condition or an HRV estimate for old growth is not included in this analysis (USDA 2013, p.77). FIA plot data is freely available to the public through publications and the internet. FIA publications are available from the Publications Section at each Research Station at no direct cost to the public.

55	5	Operations,Silviculture	Please disclose how much snag loss would be expected because of safety concerns and also from the proposed methods of log removal. Page 82 The EA does not *quantify* the degree of snag loss expected because of safety concerns and also from the proposed methods of log removal. Page 85	Snag retention would follow FW-GDL-VEG-04 and FW-GDL-VEG-05 of the IPNF Forest Plan (2015). The ability to meet this guideline would be influenced by the existence of snags that meet the guideline and human safety. Generally, where ground-based logging systems are utilized operators are more protected in mechanized equipment (feller bunchers and/or skidders), there may be more opportunity to retain a greater number of existing snags. Skyline logging systems, where manual fellers and choker setters are present, may offer less opportunities to retain existing snags. The utilization of snags as center points for reserve areas (Homestead EA, p. 25) may mitigate some of the loss of snags due to human safety issues. The degree of snag loss is not quantified due to the numerous scenarios that may exist and be encountered on the ground which could pose a safety concern to people during implementation.

56	5	Wildlife	Please disclose the methods used to determine big game hiding cover, winter range, and security, and its rate of error as determined by field review. Page 89	Forest Plan identifies desired conditions FW-DC-WL-09 (Forest Plan, p. 30) that "habitat for native ungulates is available and well distributed across the landscape," FW-DC-WL-17 (Forest Plan, p. 30) that "habitat for native ungulates is managed in coordination with state agencies and cover is managed according to FW-DC-VEG-01, FW-DC-VEG-02, FW-DC-VEG-04, FW-DC-VEG-05, and FW-DC-VEG-11." FW-GDL-WL-13 (Forest Plan, p. 32) states that management activities in elk management units should maintain existing levels of elk security. Where possible, management activities in high and medium priority units (determined in cooperation with Idaho Department of Fish and Game) should improve elk security. A guideline is a constraint on project and activity decision making that allows for departure from its terms, so long as the purpose of the guideline is met (§ 219.15(d)(3)). Guidelines are established to help achieve or maintain a desired condition or conditions, to avoid or mitigate undesirable effects, or to meet applicable legal requirements (§ 219.7(e)(1)(iv)). The purpose of FW-GDL-WL-13 is "to reduce the impacts of management on elk security habitat." (FEIS, p. 361). Note, the purpose of FW-GDL-WL-13 is not to maintain the existing levels of elk security displayed in Table 74 of the FEIS. Information in Table 74 provides baseline information to evaluate the trend or achievement of objective FW-OBJ-WL-02 and assess movement towards desired conditions. Language in the FEIS explicitly states that "FW-GDL-WL-13 will be applied to reduce the impacts on elk security habitat. Timber harvest can benefit security habitat if it is done to trend towards historic conditions and the desired conditions for vegetation. In doing so, the resiliency of the timbered stand component of security habitat will be improved or maintained and security habitat will be less likely to be lost to a large-scale disturbance (e.g. fire, insects, and disease). (FEIS, p. 361 and p. 394). Vegetation management resulting from the proposed action would change the structure and species composition of the forested community over the short term and trend towards desired conditions for multiple resources over the long term.

57	5	Wildlife, Recreation	Also, the EA fails to provide a meaningful analysis of cumulative impacts of recreational activities on elk/ wildlife populations. Pages 90 and 112 Please disclose the cumulative effects of motorized/mechanic access on wildlife populations Page 112	ee the Cumulative Affects and Affected Environment sections in the Homestead Wildlife Report. Additionally, there is no proposed increase of recreational activities, and a proposed decrease of 3.45 miles of roads. (EA pg 46)
58	5	Wildlife	The commenter opines that the FWS should be consulted. Page 92.	As stated in the wildlife report (pg 9), "The species is not known or suspected on the St. Joe Ranger District." The wildlife report also states on page C-1, that "no grizzlies have been noted within or near the project area therefore the project would have no effect on the grizzly bear" Since no species habitat and no other species are present then no consultation was/is required under ESA section 7(a)(2) if the action would result in no effects to a listed species or critical habitat. The species list pulled on April 14, 2020, from the USFWS online endangered species list (IPaC- Information, Planning, and Consultation System- at https://www.fws.gov/ipac/) reaffirmed no species are present.
59a	5	Wildlife	Please disclose the impacts of late-season snowmobile use on grizzly bear spring range. Please analyze and disclose cumulative impacts on grizzly bears from human activities and habitat alternations on land of other ownerships. Pp 92	As stated in the wildlife report (pg 9), "The species is not known or suspected on the St. Joe Ranger District." The wildlife report also states on page C-1, that "no grizzlies have been noted within or near the project area therefore the project would have no effect on the grizzly bear" Since no species habitat and no other species are present then no consultation was/is required under ESA section 7(a)(2) if the action would result in no effects to a listed species or critical habitat. The species list pulled on April 14, 2020, from the USFWS online endangered species list (IPaC- Information, Planning, and Consultation System- at https://www.fws.gov/ipac/) reaffirmed no species are present.

59b	5	Wildlife	Please disclose the FS's strategy and best available science for insuring viable populations of the fisher. Please conduct a scientifically-based analysis on the spatial and structural requirements for fisher survival and successful reproduction. There is no sound, scientifically-based analysis for the Forest Plan or entire IPNF comparing forestwide conditions with habitat metrics required to insure fisher viability. The analyses for other wildlife must address these same flaws. Pp 92	Fisher habitat quality and quantity was analyzed and discussed in great detail in the Forest Plan FEIS and associated documents. The discussion includes habitat estimates for the forest, and scientifically derived thresholds for fisher population viability. Modeling of fisher habitat determined that despite a decline in fisher habitat over the next five decades (mainly due to wildfire and root disease), habitat amounts would remain within the historic range of variation and there was no indication that fisher viability is at risk. Proposed road storage would make small improvements to fisher habitat by reducing the miles of roads potentially available to trappers during the winter, and subsequently slightly reducing the risk of trapping mortality. The Wildlife Specialist Report (pp 13-22) provides detailed analysis of potential effects of the proposed alternatives on fisher and its habitat.
59c	5	Wildlife	Please disclose the direct, indirect and cumulative impacts on important habitat components such as snags, logs, foraging habitat configuration, connectivity, cover, and impacts on predator and prey species. Pg 92 The EA does not disclose the direct, indirect or cumulative impacts on important habitat components, such as snags, logs, foraging habitat configuration, connectivity, cover, prey species impacts, etc. pg 94	Experience has demonstrated that tree harvesting and subsequent burning removes a portion of existing snags, especially the "soft snags." However, through the strategic placement of leave patches or clumps, snags within these areas would be protected. In addition, prescribed underburning would recruit some "new" snags where residual green trees are inadvertently fire-killed. The wildlife report "Appendix B: Project Design Features" discusses Forest Plan guideline compliance which includes several specifics for snag retention. In addition to snag retention, one pile per every 5 acres with in harvest units would be left unburned to provide cover and potential rest/den sites. Homestead Vegetation Analysis pg 18 states "Retained trees would provide seed to supplement proposed planting, future snags, wildlife habitat, and coarse woody debris for soil productivity." (pg 25) states "Existing snags which meet minimum snag requirements and do not pose a safety concern would be retained. At a minimum trees would be retained in order to meet Forest Plan snag retention/recruitment guidelines." Pg 45 Table 22 outlines Forest Plan guideline compliance. (FW-GDL-VEG-03, FW-GDL-VEG-04 and FW-GDL-VEG-05). Which all provide future recruitment of coarse woody debris and/or snags.

59d	5	Wildlife	The EA does not include a quantitative cumulative effects analysis for fisher considering trapping and use of the road and trail networks in the project area. Pp93	See the Wildlife Specialist report for a detailed analysis of the fisher beginning on page 13. Trapping is discussed throughout, but most specifically discussed on page 19 under “Public Activities.” Based on the current road prescription, 4.95 miles of road will be decommissioned and 1.5 miles of road will be added to the MVUM, with a net loss of 3.45 miles. (EA pg 46). Additionally, there is no proposed increase of recreational activities.
59e	5	Wildlife	The EA doesn’t mention pine marten, even though they may be present. Please disclose the FS’s strategy and best available science for insuring viable populations of the pine marten, a species whose habitat is significantly altered by thinning and other active forest management. pp 95	American marten are not Federally listed (under ESA), Region 1 Sensitive, or Management Indicator Species under the 2015 revised Forest Plan. Nor are they considered a Species of Greatest Conservation Need by the State of Idaho. They are rated by NatureServe as "Secure - Common, widespread and abundant" at both the global and State levels. Marten habitat was analyzed for the 2015 Revised Forest Plan and was found to be within HRV and would remain so at the end of the next 5 decades. There is no reason to believe that viability is a concern for this species now or in the foreseeable future. See page 45 Table 22 in the Homestead Vegetation Report for specific Forest Plan guidelines which promote recruitment and retention of snags and down woody debris.

59f	5	Wildlife	The EA doesn't disclose the FS's strategy and best available science for insuring viable populations of the northern goshawk, a species whose habitat is significantly altered by logging and other active forest management. The EA proposes noactivity areas of 40 acres "be placed around any newly discovered goshawk nest or any nest that has been active in the past five years" but there's no indication thorough surveys have or will be conducted. The EA fails to specify, based upon best available science, how goshawk "Post-Fledging Areas" should be protected "to promote nesting success and provide forage opportunities for adults and fledgling goshawks during the fledgling dependency period." Pg 95	Northern goshawk are not Federally listed (under ESA), Region 1 Sensitive, or Management Indicator Species under the 2015 revised Forest Plan. Nor are they considered a Species of Greatest Conservation Need by the State of Idaho. They are rated by NatureServe as "Secure - Common, widespread and abundant" at the global level. Northern goshawk habitat was analyzed for the 2015 Revised Forest Plan. While nesting habitat is expected to decline over the next five decades, it would still be well-distributed across nearly all 5,000-acre landscapes - allowing goshawk populations to be supported at nearly maximum density. Additionally, Forest Plan Guideline FW-GDL-WL-16 requires protection of known goshawk nest sites. The best available science suggests that the goshawk population is, at a minimum, stable if not increasing slowly, and there has been no scientific evidence that the goshawk population is in decline. There is no reason to believe that viability is a concern for this species now or in the foreseeable future. In the event any TEPS species are observed during the project, the district biologist would be notified. And the Design Features laid out in Appendix B of the wildlife report would be implemented. (pg B-1)
59g	5	Wildlife	The Homestead EA and Forest Plan do not disclose the FS's strategy and best available science for insuring viable populations of the pileated woodpecker. Neither the EA nor the Wildlife Report include any analysis. Pp96	Pileated woodpecker are not Federally listed (under ESA), Region 1 Sensitive, or Management Indicator Species under the 2015 revised Forest Plan. Nor are they considered a Species of Greatest Conservation Need by the State of Idaho. They are rated by NatureServe as "Secure - Common, widespread and abundant" at the global level. Pileated woodpecker habitat was analyzed for the 2015 Revised Forest Plan. The existing amount of pileated woodpecker habitat well exceeds HRV and remains that way at the end of the next 5 decades under each scenario studied. There is no reason to believe that viability is a concern for this species now or in the foreseeable future. See page 45 Table 22 in the Homestead Vegetation Report for specific Forest Plan guidelines which promote recruitment and retention of snags. Page 25 states "Existing snags which meet minimum snag requirements and do not pose a safety concern would be retained. At a minimum trees would be retained in order to meet Forest Plan snag retention/recruitment guidelines."

59h	5	Wildlife	The EA states there would be “no effect” on wolverine, even though they may be present in the project area. The EA fails to justify its “no effect” conclusion. The Wildlife Report claims “there is only 583 acres of potential denning habitat ….within the project area” but fails to properly define wolverine habitat. It ignores best available scientific information on wolverine biology. There is no consideration of habitat connectivity or linkages. Cumulative effects are not analyzed. There has been no project formal or informal consultation regarding the wolverine. The FS didn’t include its Biological Assessment (the document submitted to the U.S. Fish & Wildlife Service in consultation or concurrence stages) on the project website. The project would violate the Endangered Species Act. Pg 98	The EA project file incorporates the programmatic biological assessment for wolverines. The programmatic assessment discloses the direct, indirect, and cumulative impacts of Forest Service activities; this project is consistent with the programmatic assessment. Therefore, further consultation is not required. See Appendix C (C-2 to C-3) of the Wildlife report.
59i	5	Wildlife	In regards to the 2013 memo from the Regional Office (USDA Forest Service, 2013c), why are district-level specialists not allowed to arrive at effects conclusions based upon their own expertise and judgment? Pg101	The 2013 memo from the Regional Office (2013_0305_USDAWolverine Guidance) indicates district-level specialists not allowed to arrive at effects conclusions based upon their own expertise and judgment. The guidance merely instructed biologists to refrain from making effects determinations reflective of the species "threatened" or "endangered" status until such time as wolverine were officially listed.

59j	5	Wildlife	The EA doesn't disclose the FS's strategy and best available science for insuring viable populations of these species [fringed myotis, long-eared myotis, long-legged myotis, Townsend's big- eared bat]. The EA doesn't state if these Sensitive native species are found in the project area, or if surveys have been conducted. The EA doesn't quantify suitable habitat for these species. pg 101	Long-eared and long-legged myotis are not Federally listed (under ESA), Region 1 Sensitive, or Management Indicator Species under the 2015 revised Forest Plan. Nor are they considered a Species of Greatest Conservation Need by the State of Idaho. Long-eared bats are rated by NatureServe as "widespread, abundant, and secure" at the global level. Long-legged bats are rated by NatureServe as "Not rare and apparently secure, but with cause for long-term concern." See Appendix C (pgs C-9 and C-10)Wildlife Report for further discussion of Fringed Myotis and Townsend's Big-eared bat.
59k	5	Wildlife	The EA hardly considers black-backed woodpeckers, even though they may be present in the project area. The Wildlife Report justifies its non-analysis: "No immediate post-fire habitat or areas of extensive insect infestation proposed for treatment." Please disclose the FS's strategy and best available science for insuring viable populations of the black-backed woodpecker. Pg101	Black-backed woodpecker are not Federally listed (under ESA) or a Management Indicator Species under the 2015 revised Forest Plan. They are rated by NatureServe as " widespread, abundant, and secure" at the global level. Black-backed woodpecker sustainability was analyzed in the FEIS for the 2015 Forest Plan (FEIS, p. 308). The FEIS concluded that black-backed woodpeckers are at no risk region-wide. See Wildlife Report Appendix C, pg C-5 for additional discussion.

59l	5	Wildlife	The Wildlife Report states, "The species [lynx] is not known or suspected in the project area. Based on the lack of suitable habitat and occurrence there would be no effect on lynx habitat or the species and would have no effect on lynx critical habitat. No further analysis and discussion is warranted." The EA and Wildlife Report do not say if surveys in the area have been conducted in recent times. Pg 105 Please disclose if surveys target snowshoe hare occurrence data in these stands newly considered unsuitable for lynx. Please disclose if the FS conducted surveys of Canada lynx "unsuitable" habitat in the project area to find out if such habitat might in fact be suitable after all. Pg 106	See Appendix C in Wildlife Specialist Report The project does not contain a LAU or lynx critical habitat in the project area, therefore no snowshoe hare surveys or analysis was conducted. The species list pulled on April 14, 2020, from the USFWS online endangered species list (IPaC- Information, Planning, and Consultation System- at https://www.fws.gov/ipac/) reaffirmed no lynx are present in the project area.
59m	5	Wildlife	The EA fails to consider best available science for insuring viable populations of the [Western] boreal toad. Pg 108	Sustainability of western toad was analyzed under the 2015 Revised Forest Plan. Non-breeding habitat requirements for the species are general in nature, as they occur across a wide variety of terrestrial habitats. They appear to be particularly attracted to recently disturbed habitats in their adult form. The limiting habitat component for this species is likely breeding habitat, which can include beaver ponds, reservoirs, lakes, streams, marshes, and wet meadows. In addition to the Inland Native Fish Strategy (INFISH) direction (a retained decision), breeding habitat is protected under the revised Forest Plan Guidelines FW-GDL-WTR-01, FW-GDL-WTR-02, FW-GDL-RIP-02, FW-GDL-RIP-03, FW-GDL-RIP-04, FW-GDL-RIP-05, and FW-GDL-AQS-02. Additionally, design elements are incorporated at the project level (BMPs, spatial buffers, timing restrictions, and road storage or decommissioning) to maintain or improve aquatic habitat conditions. Refer to the Wildlife Report Appendix C (pg C-9) for additional analysis.

60	5	Engineering/GIS	Please disclose the funding or other meaningful distinctions between "road maintenance" and "road reconstruction" (EA at 12-13) to explain why the FS is saying major actions such as 110 "blading and shaping the road …improving drainage structures, and adding gravel to road surfaces" are not "reconstruction." We ask the FS disclose the following information concerning the project area: • The deferred road maintenance backlog • The annual road maintenance funding needs • The annual road maintenance budget • The capital improvement needs for existing roads • The road density in the project area • The number of miles of project area roads that fail to meet BMP standards or design standards. Page 112	Road maintenance to both native surface and gravel surfaced roads includes blading to reform the road contour and eliminate potholes, cleaning and improving degraded or damaged drainage structures, typically culverts, so that proper drainage occurs without damaging the road or causing other issues, and re-surfacing the road with gravel to provide a more durable wear surface as well as limit soil and roadbed erosion. Reconstruction is the work necessary to make an impassable road, or stored road safe for haul. This stated in the EA pg 12 "reconstructed to a standard suitable for safe and efficient hauling of timber and would meet current Idaho forest practices standards for water quality". Also, stated the work needed above the normal maintenance requirements to meet these standards, "Reconstruction activities would include brushing, short stretches of realignment, road widening, the addition of turnouts, improvement and/or addition of drainage structures." Realignment, road widening, construction of turnouts, and the addition of culverts and other drainage structures is not considered normal road maintenance. There is a cost differential between 'maintenance' and 'reconstruction', but these are factored into the cost of the sale. In the Forest Leadership Team's vision, goals, & priorities 2020 pg. 4 states "Although these lands offer some of the most valued outdoor recreation settings in this country, the settings and visitor experiences are increasingly at risk. Deteriorating recreation facilities and roads, eroding trails, and increasing user conflicts pose numerous challenges and a decline in the quality of the visitor experience. Currently, we can only maintain to standard half of our roads, trails, facilities, and other components of our infrastructure. Access to the National Forest System is more limited. We will take steps to address these challenges and create more enhanced, sustainable recreation opportunities, access, and infrastructure to better meet the needs of visitors, citizens, and users." NEPA environmental analysis and decision-making improvements can help us achieve goals and objectives for enhanced recreation, improved access, and a more sustainable infrastructure." We recognize the need and in accordance with National policy and directives have used the TAP process to reduce the number of miles without damaging either our resources or the public's right to access. This fundamental reduction in our roads footprint will in kind reduce the burden of cost. The roads used for haul in the project area will be brought up to or exceed BMP's. The

<table>
<tr><td></td><td></td><td></td><td></td><td>primary funding tool for this is the Timber sale. Funding is a matter of public record. See comment 61 for road density.</td></tr>
<tr><td>61</td><td>5</td><td>Engineering/GIS</td><td>Please provide a map of the entire road system in the watersheds affected by the proposal, including all national forest system roads, the nonsystem roads, all existing road templates, and all existing unauthorized roads—not just those the FS plans to use for this timber sale.
Please disclose the current, during-project, and post-project road densities in the project area. Page 112</td><td>This table was produced from the layer route linear events, as it shows all roads in the project boundary and supplemental layers to include proposed temporary roads and new construction. Maps were also produced from these layers and in the Middle Marble Watershed outside the project boundary non-infra roads were added to the map as there are a handful that do not show on route linear events. For during project roads temp and new construction were added. For post project roads all decomissioned roads were removed and all temp roads were removed. All roads are on the maps but due to label density not all roads are labled. Calculations for Road density were created within the Homestead Project Boundary. The project densities increase from the existing density of 3.66 to 3.92 during the project and then decrease to 2.14 post project.
<table>
<tr><th>Homestead Boundary</th><th>Existing</th><th>During Project</th><th>Post Project</th></tr>
<tr><td>Land Acres</td><td>16,757</td><td>16,757</td><td>16,757</td></tr>
<tr><td>Land Square Miles</td><td>26.18</td><td>26.18</td><td>26.18</td></tr>
<tr><td>Decommissioned Roads</td><td>4.97</td><td>4.97</td><td>0</td></tr>
<tr><td>Non-Decommissioned Roads</td><td>90.83</td><td>97.7</td><td>55.9</td></tr>
<tr><td>All Road Miles</td><td>95.8</td><td>102.67</td><td>55.9</td></tr>
<tr><td>All Road Miles - Density mi/mi^2</td><td>3.66</td><td>3.92</td><td>2.14</td></tr>
</table>
A map delineating the Marble Upper, Lower and Middle watershed roads has been added to the EA Appendix C-Map 8.

The TAPS map can be located in the project record under Transportation, Final TAPS Map .pdf</td></tr>
</table>

62	5	Engineering	The EA states, “eight miles of nonsystem road segments in the project area would be used for the project and then added to the National Forest Transportation System. Of these segments, one would remain open, three would be stored for future use, and two would be closed with a gate.” What is the origin of those eight miles of nonsystem roads? Why do they exist on the landscape? How many more miles of “nonsystem roads” exist in the project area, and what are their origins? Page 112	The Transportation Analysis Process looks at all roads within the project area and makes a determination as to their future needs. Most non-system roads are created by two primary sources, roads previously un-identified, or user created. With the help of LIDAR, we can now pick up very old logging roads that were previously unknown, as well as user created roads that were un-cataloged. With this new information the IDT took an objective Risk/Benefit approach to determining the future use, or decommissioning of these roads. For further information please see the TAPS Report.
63	5	Engineering/ IDT Lead	“Approximately five miles of existing stored roads would be reconstructed…” Please disclose the NEPA document(s)/decision(s) that resulted in those roads being stored, and the dates those roads were stored. Page 112	These roads were changed from ‘Undecided’ to ‘Not Needed’ by a NEPA document labeled ‘Lower Marble EA’ dated 12/1/1997.

64	5	Engineering	Please disclose if the project area is being managed in compliance with the Travel Management Regulations at 36 CFR 212 (Subparts, A, B, and C) and the Executive Orders related to Subpart B. Subpart A requires the FS to involve the public in a scientifically based process which designates the Minimum Road System both in the analysis area and forestwide, so that unnecessary or ecologically damaging roads are targeted for decommissioning and the economic liabilities of roads are minimized. Page 114.	The Homestead Transportation Analysis Report is specific to the project area. The Forest service takes this opportunity to re-evaluate the roads system in view of upcoming projects within the boundary. With the increased maintenance needs and re-opening previously stored roads necessary for timber haul, this has the potential of changing the transportation analysis. With this more focused look at the project area we can identify previously unidentified roads. . This was done in a systematic and deliberate fashion with an interdisciplinary team with graphical results allowing for more objective and scientific decision-making. The stated goal is to provide a minimum road system allowing for a multi-use forest thus reducing the impact and costs of our road system. This process is in line with FSH 7709.55 Travel Planning Handbook, Chapter 20 – Travel Analysis (was added to working documents) and was developed to show the decision making process in compliance with the Code of Federal Regulations. This was then presented to the public for review. Please see TAPS Report.

65	5	MVUM/GIS	The EA alleges a need to "Update the motor vehicle use map to accurately reflect current routes." Has the FS issued a Motor Vehicle Use Map (MVUM) for lands covering all of the project area? If so, what was the process the FS used to designate the routes open to the currently authorized motorized uses, as per the MVUM? Page 115	There is a current Motor Vehicle Use Map for the entire St. Joe Ranger District, which is inclusive of the project area. Complete documentation for the St. Joe Travel Management Plan Environmental Assessment is available on our public website at: https://www.fs.usda.gov/project/?project=26188 Yes, the Forest Service has issued an MVUM for lands covering the Homestead project area the most recent version is dated March 29, 2019. https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd530189.pdf. The Homestead Project reevaluates existing routes and proposed changes to current routes that upon implementation will be reflected on the next updated MVUM. The transportation analysis process (TAP) was used to make determinations for travel that support the Homestead project purpose and need to include route construction and changes in authorized use. All of the roads and trails in the project area are evaluated for current and future needs by various resources. Using the (TAP), the IDT identified needs and recommendations for road access and improvement, road decommissioning, and short-term/long-term storage of system roads in compliance with the minimization requirements of 36 CFR 212 Subpart B. The analysis and decision to implement any recommended management practices from TAP will be analyzed as required by the National Environmental Policy Act (NEPA). Road maps, design features for road management, and a detailed list of road treatments are located on the project website under analysis – Appendix (B, C, and D). https://www.fs.usda.gov/project/?project=53049 The St. Joe Travel Management EA precedes the Homestead project, it was developed through the travel management process and used to designate the routes open to the currently authorized motorized use on the MVUM. It (St. Joe Travel Management EA) is a continuation of travel management that began decades ago to minimize effects to resources affected by public motorized travel (PF: ACT-24) pp. 12. For details on the previous road analysis please refer to the St. Joe Travel Management Environmental Assessment Decision Notice and FONSI signed in June, 2016. https://www.fs.usda.gov/nfs/11558/www/nepa/51890_FSPLT3_3106821.pdf.
66	5	Fire/Fuels	Nothing in the EA informs the public about wildland fire ecology. Page 119	The Forest recognizes the role of wildland fire in the ecosystem and strives to allow fire to play that role wherever and whenever possible under the guidance of the 2015 IPNF Land Management Plan. Balancing a myriad of other values that could be at risk from a wildfire, including public and firefighter safety, private and public inholdings and infrastructure, sensitive species of plants and animals, and smoke production to name a few, is of paramount consideration when making the decision to suppress a fire. Natural fuels burns are proposed as a part of the project and are discussed on page 9 and again on page 42 of the EA (202 acres of low intensity prescribed burning to enhance openings adjacent to known whitebark pine habitat).

67	5	Fire/Fuels	Please disclose the efficacy of the proposed activities at reducing wildfire risk and severity in the project area in the future, including a two-year, five-year, ten-year, and 20-year projection. Please disclose when and how the IPNF made the decision to suppress natural wildfire in the project area and replace natural fire with logging and prescribed burning. Page 120	Page 43 of the Homestead EA refers to the project file (PF: FF-008 thru FF-011) where complete reports on landscape fire behavior modeling for the treatment units in the project area can be found. There is a need for future treatments because forest succession adds to the fuel loading and structure of stands as trees grow and die and decay. No treatment will last forever and will require subsequent entries and treatments detailed in the silvicultural prescriptions. Natural fire does play a role on the Forest, and management decisions on each fire start are made at the time of occurrence. Prescribed fire and logging effects do not completely replace the role of natural fire. The policy of suppressing fires on the IPNF originates from the 1910 fires, when many towns were destroyed and lives were lost. As the Forest Service has since learned, fire suppression has caused unintended consequences. Although it is understood that fire has a role in the ecosystem, each fire start is evaluated based on multiple factors on whether to suppress it or to allow it to burn under constant management by fire personnel. Not all naturally occurring fires can be allowed to burn with minimal suppression efforts. Because it is understood that fire plays a critical role in forest ecosystems, prescribed burning is used to supplement naturally occurring fires. Prescribed burning allows for a more controlled scenario and can be done out of peak fire season when uncontrolled natural fires can threaten lives, property, infrastructure, and the ecosystem. Finally, the decision on to whether to suppress fires occurring in the project area is not a project-level decision.

68	5	Fire/fuels	The EA states, “Landscape fire behavior modelling indicates that the fuels reduction treatments in the proposed action reduce flame length and fireline intensity if a fire were to start under typical fire season weather conditions (PF: FF-009, FF-010).” However please note your (the IPNF’s) Buckskin Saddle EA admits: “The proposed action would see a short-term increase in risk of ignition during harvest-related activities.” The Buckskin Saddle EA also admits that slash on the ground increases the risk of fire severity: “Flame lengths would increase following harvest, and this is mainly due to an increase in slash.” The Homestead EA doesn’t adequately reconcile those facts with the claims of “reducing” risk and it fails to say how long this slash typically is left before “treatment.” Page 165	Page 42 of the Fire and Fuels section of the Homestead EA recognizes that slash would probably increase fire behavior in the short term, then goes on to talk about the importance of the timely treatment of activity fuels. The timely piling and burning of slash is one of the design features for fire and fuels in Appendix D of the Homestead EA. Limbs and tops attached to whole trees during logging operations will be yarded to landings, where they will be piled concurrent with harvest. Subsequently piles of slash will be burned (scheduled within one year of the harvest). Breakage occurring in the unit will be either piled and burned, broadcast burned, or left to decompose and add to soil productivity on site. This will be done within 1-2 years of harvest.
69	5	Fire/Fuels	The EA also fails to deal with the fuels issue on the appropriate **temporal** scale. How landscape level fire behavior at any period except for very shortly after treatment would be changed or improved is ignored. Page 167	Please refer to responses for Comment #s 5-67 and 5-68 above, as well as the IFTDSS modeling reports in the Homestead Fire and Fuels Project Record

70	5	Fire/Fuels, Silviculture	Please disclose the project logging impacts on the rate of fire spread. Please disclose the implications of how the fire regime is changing due to climate change. Page 173	Rate of fire spread is predicated on several factors: Slope, aspect, fuels (fuel types, moistures, and configurations), wind speed, and other components of weather. Fuels are the only variable that we have any control over. Reducing the amount of canopy cover could have an effect on shading, increasing fuel temperatures and decreasing fuel moistures. An open canopy could also result in higher low-level wind speeds. However, a greatly reduced fuel load after timber harvest and slash treatment points to much lower average rates of spread. (See fire modeling in project file: FF-008-011 for detailed reports on fire behavior, including rate of spread.) This is primarily due to lower flame lengths and fires that spread on the surface versus in the crowns of tightly-spaced trees. These scenarios are based on 97th percentile weather conditions that are present only during the hottest and driest parts of fire season. With the dynamic nature of the forest environment the vegetation types, amounts, and composition are expected to change over time. Please also see responses to Comments #67, #68, #69 dealing with fire behavior. Climate change and fire regimes: Additional citation added to project file: USDA Forest Service. 2010. KIPZ Climate Change Report. Idaho Panhandle National Forest and Kootenai National Forest. This report is a synthesis of scientific information on past and projected trends in regional climate and climate-related impacts to forest resources. Chapter 10 of the report discusses climate related trends in wildland fire. It acknowledges that future changes in climate could have major effects on the timing, frequency, intensity, severity and average annual extent of wildland fires (p. 85). While it is nearly impossible to predict with stand-level accuracy the potential effects of climate change on the proposed units in the Homestead project, general guidance for these habitat types can be found in the referenced document as follows: Where appropriate, prescribed fire, mechanical thinning, and wildland fire management can restore fire dependent ecosystems so that they are less vulnerable to changes in disturbance under changing climatic conditions. This will be most effective in forest areas that historically burned in low and mixed severity fire regimes but have experienced extended periods without fire and now are at high risk of burning in stand replacement fires. To be

				effective, fuel treatments need to be of sufficient scale and strategically arranged to achieve desired effect on future fire behavior (p. 88).
71		Scenic	Please disclose how Project complies with the Idaho Roadless Rule. Page 175	The proposed action does not include any activities within the Grandmother Mountain Roadless Area or within the roadless expanse, thereby complying with the Idaho Roadless Rule. Please see the project file for more information
72		All	The EA's References section is incomplete. Not all cites in the body of the document are listed in the References section.	All specialist will review when the response to comemtns is complete Fire and Fuels did not directly cite any references in the EA, however a page of references that were used as a basis for the analysis is included in the project file A citation for the IFTDSS fire modeling webpage was added, as well as the KIPZ climate change report.

73		Various	The EA violates NEPA because the FS has not insured the reliability of data input to the models Please disclose the statistical reliability of all data the FS relies upon for the Homestead analysis. However, there is no evidence that the FS has performed validation of any the models for the way they were used to support the EA's analyses. There is no documentation of someone using observation or experiment to support the model hypotheses.	**Hydrology**: Using observation to support model]Page 29 of the EA states: Based on ECA modeling, no detectable increases, beyond existing variability, in peakflows would be expected from the LMU Marble Creek Watersheds. And the, the EA provides field surveys to support the model by stating: Based on Pfankuch stream surveys, no issues were observed or identified as being attributed to existing ECA peakflow events. (Hydro) Modeling for Fire and Fuels analysis was done using IFTDSS (Interagency Fuels Treatment Decision Support System). IFTDSS is a web- based application which hosts a complete set of reference data available for the entire US including LANDFIRE fuels information. Actual historic weather and fuel moisture conditions were pulled directly from an observation station in the vicinity of the Homestead project area (Lines Creek RAWS). Some of the capabilities and limitations of the model are as follows: **Fire/Fuels**: In IFTDSS, Landscape Fire Behavior is driven by FlamMap. FlamMap is a fire behavior mapping and analysis software application that computes potential fire behavior characteristics (such as spread rate, flame length, and fireline intensity) over an entire landscape under constant weather and fuel moisture conditions input by the user. FlamMap simulates surface and crown fire behavior characteristics using Rothermel's 1972 surface fire model, Van Wagner's 1977 crown fire initiation model, and Rothermel's 1991 crown fire spread model for a single instance in time. Because environmental conditions remain constant when using FlamMap, MTT, Burn Probability, and TOM it will not simulate temporal variations in fire behavior caused by weather and diurnal fluctuations as FARSITE does. Nor will it display spatial variations caused by backing or flanking fire behavior. These limitations need to be considered when viewing FlamMap output using these models in an absolute rather than relative sense. However, these outputs are well-suited for landscape level comparisons of fuel treatment effectiveness because fuel is the only variable that changes. Outputs and comparisons can be used to identify combinations of hazardous fuel and topography, aiding in prioritizing fuel treatments. **Wildlife**: Forest Service vegetation data and computer mapping tools are used to identify potentially affected habitats in the project area when wildllife habitat evaluations are lacking. Existing habitat condition is determined by extracting information from Forest Service databases; aerial photo interpretation; field reconnaissance; GIS mapping, data tables, and analyses of satellite imagery; VMap 2014 dataset; and stand exams.Exam data from FSVeg is the preferred data source for vegetative information utilized in the development of wildlife habitat models, as it represents an accurate documentation of the vegetation within a specific stand location at

				the time of the exam. However, stand exam coverage is not complete for the entire Forest. To help address gaps in FSVeg data availability within Project Areas the Biologist utilized the Region 1 Existing Vegetation Mapping Program (V-Map), a vegetation model produced to provide a Forestwide geospatial database of existing vegetation. "V-Map is a remote sensed product which uses a combination of satellite imagery and airborne acquired imagery. The image data (i.e., pixels) are put through a process of aggregation to derive spatially cohesive units (i.e., polygons). A small portion of these polygons are then sampled through aerial photo interpretation and field data collection to determine their composition and through spatial statistics, unsampled polygons are given labels based on an analysis of the sampled polygons. Draft map products are then field verified and appropriate changes are made in the labeling algorithms. Final results are then used to populate the V-Map base-level feature class. A variety of post-processing algorithms are then used to create the mid- level feature classes of the V-Map database." (Brown and Barber 2012). Habitat relationships were used to model available habitat within the project area. See Samson's 2006 Conservation Assessment, Samson's 2006 Habitat Estimates for Maintaining Viable Populations, Bush and Lundberg 2008. For more information on the FIA program see http://www.fia.fs.fed.us.

74	5	Economics	How much will it cost U.S. taxpayers have the FS implement the project? We object to the fact that the economic analysis in the EA fails to account for many of the restoration activities. The analysis is inaccurate, flawed, and misleading. Please disclose the funding source for non-commercial activities proposed. The EA fails to present enough economic analysis to prove this huge subsidy would be, on balance, a good investment of taxpayer subsidies. We object to the fact that the economic analysis fails to provide a robust basis for the claimed project revenues. We object to the fact that the economic analysis in the EA obfuscates the taxpayer subsidization required to pull off this timber giveaway. The EA does not disclose a reasonably itemized monetary costs of the project activities. Along with the costs of those specific project actions, the costs of road maintenance proportionately attributable to this project area, and the cumulative financial impacts of carrying out fire suppression policy were not analyzed and disclosed. The Economics Effects report refers to something called a "job." It says, "The project would also create or maintain an estimated 25	A financial efficiency analysis was performed, incorporating the costs and benefits that were determined to be appropriate for the scope of the analysis in the EA. Please refer to Table 16 in the EA for the results of the financial efficiency analysis. Net present value (NPV) is the measure that represents the financial efficiency of the project. • NPV for the Timber Harvest & Required Design Features is $2.6 million. • NPV for the Timber Harvest & All Other Planned Non-Timber Activities is $2.0 million. Restoration activities are taken into account in the financial efficiency analysis. While the activities that were taken into account for the financial efficiency aqnalysis are not listed individually in the EA, they are itemized in the Project Economic Analysis Tool (PEAT) included in the project file. Revenue was calculated in the PEAT tool (see project filea) as The formula is: price * quantity = revenue, wherePrice is the expected high bid ($/CCF) and quantity is the harvest volume (CCF). A "job" is an annual average of monthly jobs. This is a standard convention and consistent with methods used by the U.S. Bureau of Labor Statistics. When jobs are counted this way, one cannot tell from the data the number of hours worked or the proportion that are full or part-time or anything about seasonality; only that they are yearlong. These jobs are different than full time equivalent (FTE) jobs. The timber sale activities are expected to be completed over a 6-year period, and the timeframe for all activities is 9 years. The average annual labor income corresponding to the jobs supported during the project is is 2.1 million for the Timber Harvest & Required Design Features and $2.2 million for the Timber Harvest & All Other Planned Non-Timber Activities.

			jobs per year during the life of the project." How long is that? What is the expected income from the average "job" for the jobholder? No definition of job is provided. We ask the FS disclose the following information concerning the project area: • The deferred road maintenance backlog • The annual road maintenance funding needs • The annual road maintenance budget • The capital improvement needs for existing roads • The number of miles of project area roads that fail to meet BMP standards or design standards Please disclose the itemized costs for each of the following: • new temporary roads • new permanent roads • project-related road maintenance • road decommissioning • road storage • all other road-related work including culvert replacements, other drainage improvements, bridge work, etc. • reconstruction and realignment	The following costs for the items listed below are addressed in the EA and/or project file. See the Alt 1 tab of the PEAT document in the project file. Logging Activities Snowplowing • BMP maintenance on haul roads • New temporary road construction / obliteration • Piling of activity fuels • Landing cleanup • Brush disposal • Erosion control • Additional Roadwoark not included above: • Road construction/reconstruction - haul routes • Road decommissioning - nonhaul routes • Culverts installation, upgrades or removal - non haul routes • Road Storage (gates, kelly humps, etc) - Haul routes Restoration Activities Weed spraying - connected with harvest • Fireline/fuel break construction - Hand - brush disposal • Fuel inventory - brush disposal • Fuels burn - broadcast burn - brush disposal • Burning fuel piles • Air quality monitoring • KV site prep burning • KV Burning fuel piles • Regeneration Planting • Regen exams • Regeneration Animal damage control • Whitebark Pine treatment Other • Sale preparation • Sale administration Many of the costs the commenter inquires about are the costs of doing business as a multiple use federal land

			on trails • conduct all non-harvest related burning • biomass removal • Permitting • Enforcing motorized travel restrictions on the roads stored after project activities • Responding to Objections • Collaborative meetings and other Stakeholder Group activities which incur costs from FS participation or attendance • develop rock pit/quarries • Post-project monitoring • precommercial thinning • Whitebark pine restoration • sale preparation and administration • project-related weed treatment • other project mitigation • post-project monitoring • environmental analyses and reports • public meetings and field trips • publicity • consultation with other government agencies • responding to comments • FS employee salaries for performing project analyses and administration	management agency, following the Code of Federal Regulations. Congress appropriates funding for Forest Service personel to carry out their program of work each year. Other costs the commenter requested are either not anticipated for this project or considered to be outside the scope of the economic analysis for the EA.

75	5	Scenic	Without including any analysis, the EA says, "The proposed action would meet the Scenic Integrity Objectives outlined in the Forest Plan." Please disclose the Forest Plan direction for visual quality that applies to each unit and disclose whether each unit meets that direction. Page 188.	Please see the project file for a table which displays the Scenic Integrity Objectives (SIOs) applicable to each unit. Analysis of the project was conducted from viewing positions based on the points of interest, routes/roads, trails, rivers, and lakes identified during forest planning as having high, moderate, or low concern for scenery (See USDA 1995). These viewing positions are identified in the Scenic Resources report located in the project file. The analysis specific to those viewing positions is contained in the same document, and discloses the visibility, anticipated effects, design features/mitigation measures, and compliance with the appropriate SIO(s) of each unit. Refer to that document for more information.
76	5	Collaboration, District Ranger	The EA states, "The Forest Service consulted the (Shoshone-Benewah Collaborative Group) during the development of this environmental assessment." Please disclose the financial interests of each of the entities making up the Shoshone-Benewah Collaborative Group, relating to the Homestead proposal. Page 192	Any financial interest questions should be pursued by the commenter directly with the Collaborative Group. <u>Participating Members</u> Jack Buell Benewah County Commissioner, Chairman Mike Fitzgerald Shoshone County Commissioner, John Hansen Shoshone County Commissioner Pam Secord Benewah Natural Resource Team Dean Johnson Benewah Timber Resources Advisor Peg Carver North Idaho Water Rights Alliance Leslee Stanley Shoshone County Horseman's Assn. Robin Stanley Shoshone County Sportsman's Reid Ahlf Idaho Forest Group Mike Petersen The Lands Council

	6	Scenic, Recreation	The decision memo should have items to protect recreation travel and camping opportunities. The final transportation will change somewhat due to road reconstruction and road decommissioning. I run the Idaho Trails web application that shows roads open to motor vehicle use and well as trails in the project area. I would like to receive a copy to the changes in a geodatabase or shapefile format, so I can get those changes into my app at https://trails.idaho.gov .	Design features and standard contract clauses will mitigate temporary impacts to recreation. Design features are outlined in Appendix D of the Homestead EA. Contract clauses will address signage during log haul.
			May 19 2020	