Piquett Creek Project
Final Implementation Plan- Public Feedback Summary

On May 19, 2020 the public was invited to participate in helping the West Fork Ranger District to develop and refine project activities and locations that would occur during implementation. A letter was mailed out to individuals and groups who commented during project development along with a press release and Facebook post. The request asked that desired feedback and recommended potential changes to the draft implementation proposal, focus on how well the activities meet the purpose and need and move the areas towards the desired conditions. We asked the comments to focus on how to best implement the decision.

Below is a summary of the feedback received that is applicable to improving the draft implementation plan and how or if that feedback was used to finalize the implementation plan.

Unit Specific Feedback

Unit 2- Area has had previous fuels treatments. Special location for meditation. Exclude from all treatments. Untouched as an island of beauty. (RM)

Consideration: Appreciate your feedback on this unit. There was opportunity to adjust the proposed treatment in this area. I reduced the unit by 15 acres and retained a higher residual basal area to protect aesthetics. The length of temp road was reduced by half and will utilize an existing two-track road to minimize disturbance. Prescribed fire will be used to clean up residual slash and maintain the conditions.

The primary reason for treatment in Unit 2 is to lower the risk of future beetle caused mortality. The plot data collected in this stand range from 120 - 200 Basal Area (BA). This stand generally has healthy trees due to past thinning treatments however we have the opportunity now to reduce stand density and increase resilience and resistance to potential future beetle activity. The stand has experienced past mountain pine beetle mortality and has some dwarf mistletoe in the DF. The prescribed improvement cut favors the largest PP while retaining the best individuals in all size classes and lowering the stand density to roughly less than 60 BA, the recommended BA for low beetle hazard rating based on entomologist recommendations and studies.

Units 2, 14, 119- Generally we support opening up and/or clearcutting the drier south-facing pine savannas, such as units 2, 14, and parts of 119, although we recognize that the value of these areas for merchantable timber is likely lower. (FWP)

Consideration: Appreciate your feedback on these units. These units aren't proposed for regeneration harvests, but the proposed improvement cuts in Units 2 and 14 and fuels treatments will still reduce canopy cover and improve big game forage.

Units 6 & 7- Concerned about the proposed clearcutting in units 6 and 7, which are north-facing slopes, and which are often important habitat for nongame species as well as hiding/thermal cover for big game. Given the small scale of the project in the larger landscape of elk habitat, in addition to the existence of FR 5720 already cutting into the heart of these dense stands, the overall impact of a clearcut in units 6 and 7 should be minimal. (FWP)

Consideration: Appreciate your feedback on these units and treatments. There was an opportunity to drop some of the regeneration harvest in this area while still meeting fuels reduction and forest health goals. Units 6b and 7b were dropped from treatment to maintain the hiding/thermal cover above the 5720 road system that is connected to higher elevation unmanaged forests. This also reduced the need for 3,300' of temporary road construction.

Unit 15: Very open already, probably close to historic conditions. Do non-commercial treatments only. (JL)

Consideration: Appreciate your feedback on this unit and proposed treatments. Based on the proximity to private land and predicted fire behavior as well as the departure from desired conditions, I have decided to stay with the proposed improvement cut and fuels treatments.

Unit 15 is variable in density with greater density higher up on the slope. Overstory stand density and species composition contain greater amounts of DF than typical of a warm and dry, fire maintained, western aspects. Plots ranged from 100 BA to 160 BA and patchy. An Improvement cut would improve stand resistance and resilience to future insects, disease and fire by reducing density to 40-60 BA, featuring drought tolerate PP, and moving the stand towards a 2-aged PP stand. A non-commercial understory treatment to reduce ladder fuels and prescribed fire will follow the commercial treatment.

Unit 17: Contains O.G. PP with some DF. Leave the old/big PP. Also leave the old/big DF; they were clearly part of historic conditions. Use only non-commercial treatments in old growth to avoid disturbance/change to the understory/ground cover. Old Growth is not only about the trees. (JL)

Consideration: Appreciate your feedback on this unit and the proposed treatments. Based on the proximity to private land and predicted fire behavior, departure from desired conditions and limited effectiveness for protecting the large PP from insects or stress related mortality with non-commercial treatments, I have decided to stay with the proposed treatments. Based on the average diameter/size of the Douglas-fir in this unit only using non-commercial treatments would not reduce the stand density related stressors that are putting this stand and large old ponderosa pine at risk to mortality from insects and disease and wildfire. This unit contains some old PP and DF but based on a walkthrough exam does not qualify as an old growth stand as per the criteria requirements in the 1987 Forest Plan. The prescription will leave all of the large PP and DF that are considered healthy.

Unit 17 is a dense stand of Douglas-fir and remnant large old ponderosa pine. Plots range from 120 – 280 BA. Ten inch DBH Douglas-fir are suppressed and roughly 115 years old with dwarf mistletoe. The current stand is densely stocked, full of dwarf mistletoe infected Douglas-fir and has no natural ponderosa pine regeneration. To carry this stand into the future and increase resilience, stand density needs to be greatly reduced, disease removed and ponderosa pine planted to restore and maintain the fire created mixed conifer early seral species.

Unit 19: Already very open and close to historic conditions. Recommend non-commercial treatment only. (JL)

Consideration: Appreciate your feedback on this unit. There was an opportunity to adjust the proposed treatment in this area. I reduced the unit by 7 acres, focusing the improvement cut on the portion of the stand most at risk to future insect and disease mortality. Non-commercial thinning and/or prescribed fire will be utilized on the remainder of the area.

The stand density in the portion of Unit 19 proposed for an improvement cut ranges from 160 – 200 BA which puts it at risk to future mountain pine beetle activity. The Douglas-fir contains dwarf mistletoe and light western spruce budworm. To reduce future MPB and increase the natural resistance and resilience to beetles, stand density would be lowered to 40-60 BA favoring the retention of ponderosa pine. The improvement cut would be followed by an underburn to increase big game forage and reintroduce fire.

Unit 20: Appears to be little commercial timber. Is this an old seed tree unit? Recommend non-commercial treatment only. (JL)

Consideration: Appreciate your feedback on this unit. There was an opportunity to adjust the proposed treatment in this area. I've decided to drop the proposed seed tree harvest and instead utilize non-commercial thinning and prescribed fire to meet the desired conditions.

This stand varies in density with aspect changes. The Douglas-fir is suppressed with 8 inch DBH trees exceeding 100 years old that will never release and grow into larger diameter trees nor create a healthy stand. The ridges contain scattered ponderosa pine with dense Douglas-fir regeneration underneath. The non-commercial treatment would remove the Douglas-fir ladder fuels and protect the old remnant ponderosa pine. Utilizing prescribed fire-low intensity would increase big game forage, reintroduce fire and reduce fuels.

Unit 22a: Seed tree/ shelterwood is planned here, but this is adjacent to old terracing and has openings created by an old burn. There is mistletoe, but so what? Recommend only non-commercial treatment. (JL)

Consideration: Appreciate your feedback on this unit. There was an opportunity to adjust the proposed treatment in this area. I've decided to drop the proposed clearcut with reserves and instead utilize non-commercial thinning and/or prescribed fire to meet the desired conditions.

Approximately 50 percentage of the lodgepole pine has been killed by past mountain pine beetles and is now creating a jack-strawed arrangement of dead and down fuels. The subalpine-fir and understory Douglas-fir regen are not doing well and are experiencing high levels of western spruce budworm defoliation. This stand is at or very near it climax and facing significant mortality. Non-commercial thinning will remove the understory impacted by western spruce budworm defoliation. Utilizing prescribed fire in this stand will reduce the fuel loadings and create sites suitable for natural regeneration of a new stand.

Unit 22b: Very park-like open understory under closed canopy DF. Good thermal cover for wildlife. This is a planned seed tree/shelterwood, but it would be a shame to destroy this area. (JL)

Consideration: Appreciate your feedback on this unit. There was an opportunity to adjust the proposed treatment in this area. I've decided to drop the proposed seed tree harvest and instead utilize non-commercial thinning and/or prescribed fire to meet the desired conditions.

The non-commercial treatment would remove the Douglas-fir ladder fuels and protect the old remnant ponderosa pine. Utilizing prescribed fire-low intensity would increase big game forage, reintroduce fire and reduce fuels continuity.

Unit 24: Has some O.G stands. Do only non-commercial work in those, and leave old/big PP and DF. (JL)

Consideration: Appreciate your feedback on this unit. There was an opportunity to adjust the proposed treatment in this area. I've decided to drop the proposed improvement cut and instead utilize non-commercial thinning and/or prescribed fire to meet the desired conditions.

The non-commercial treatment would remove the Douglas-fir ladder fuels and protect the old remnant ponderosa pine/Douglas-fir. Utilizing prescribed fire-low intensity would increase big game forage, reintroduce fire and reduce fuel continuity.

Unit 100- Area has had previous fuels treatments. Don't use prescribed fire- low intensity. Would like to see the many open grassland areas of large trees left unfired. This would reduce the risk of aesthetically spaced trees unintentionally destroyed by the firing. The same goes for the area below the 5720 road below unit 100 that faces trapper peak. (RM)

Consideration: Your feedback that it has already been treated and is in good condition fuels wise is accurate. Our intent with utilizing a low intensity maintenance burn in that unit is to maintain the current conditions. The maintenance treatment will be applied in the future, so the unit does not move away from the desired conditions of a healthy stand with low fuel loading. Periodic, low intensity prescribed fires are a very effective and low impact method of accomplishing that maintenance. There may be some short-term impacts to the visual quality when the prescribed fire is implemented such as some scorch of lower limbs, but the long-term benefits should maintain the characteristics that you value.

Units 102, 103, 116, 119- There are additional opportunities for commercial harvest within these units. (RC COMM)

Consideration: We took a closer look at these units to determine what activities would best move them towards the desired conditions. A portion of unit 102 (4 acres) was added to Unit 4 and will receive a seed tree commercial treatment. There were other areas within these units that would benefit from commercial treatment however, topography or road access were limiting factors as to why they weren't originally proposed. The areas currently identified for harvest are the highest priority for treatment and maximize the acres treated commercially while remaining within the truck load limits established for the project. Adding additional commercial units would necessitate other high priority units be removed from commercial treatment.

Unit 114- NE side has a stand of large ponderosa pines. Would like to ensure those trees remain and survive the activities intact. (RM)

Consideration: Appreciate your feedback on this unit. Our goal is also to maintain the older, more mature trees in this unit. Most of Unit 114 is at high risk for stand replacing fire which would likely result in the loss of the large ponderosa pine. The proposed non-commercial/prescribed fire treatments in this stand are in alignment with your concern. To protect those trees from a potential wildfire, our treatments would involve removing the smaller Douglas-fir trees by thinning and hand piling and then burning. Those treatments would then allow for a low intensity prescribed fire that would further protect that stand from a potentially more intense wildfire. We will place an emphasis on ensuring the survival of the larger trees in that stand.

Activity Specific Feedback

Aspen Treatments

Objectives to specifically treat and promote aspen clones and groves are missing. Aspen clones are some of the most important wildlife habitats on the range. High risk clones should have competing conifers removed via thinning. Some clones should be targeted specifically for prescribed burning. Some clones may benefit from root plowing. Livestock should not be allowed to graze clones. It is also possible that some clones are going to disappear due to climate change. Focus aspen management on clones likely to persist in spite of climate change. (SS)

Consideration: Very little aspen is currently present with the project area. This was the reason aspen restoration was not carried forward as a stand-alone activity. We have identified a few small clones within unit 14 in which prescriptions will be designed to promote the health and expansion of those clones. Conifers will be removed from within the clones and the surrounding area. Prescribed fire would then be carried out to stimulate sprouting. Piquett Creek doesn't have any active cattle grazing which should reduce livestock impacts on aspen regen. Thanks for highlighting this rare important habitat. We will make sure to prioritize it wherever it is found in the area.

Tree Planting and Re-Vegetation of Native Plants and Shrubs

Suggest that such planting be carefully implemented so the planting does not appear artificial. On the broader subject of planting trees and shrubs, it is tough to get native plants re-established when big game are present. Sometimes it takes near herculean efforts to have a successful planting. I would like to see shrubs planted to specifically benefit mule deer. To get a successful planting, it seems that a large number of plants must be used. I would still expect huge losses, but maybe some will survive wildlife browsing. Some plantings may require wildlife cages. (SS)

Consideration: Planting shrubs to benefit wildlife is a great idea. We could incorporate this into the implementation plan where appropriate. Potential opportunity to work with Mule Deer Foundation and local volunteers to complete the planting and survival monitoring. Depending on site conditions, tree planting often occurs on a prescribed spacing with a flexible spacing variance. Tree planters are expected to pick locations that provide natural shade such as stumps, down logs, etc. The number of trees per acre planted on site depends on the desired future stand and expected mortality. Planting variability and the natural expected loss of seedlings often gives stands a more irregular look. Planted stands will not look like past terraced plantations. Netting and shade tubes are used following planting to protect seedlings from big game browse.

Pile Burning

Ensure complete consumption of piles. Burn all 4-6" logs and slash to completion. This will help to create results that will meet the goal of treating the project with a high regard for aesthetics. (RM)

Consideration: Reducing the fuel loading to change the fire behavior is the goal of prescribed fire treatments. To meet that goal it is not necessary to completely remove every piece of fuel. There are also other reasons to leave a certain amount of those type of partially burned materials (wildlife, soils and erosion). During pile burning activities, emphasis to obtain complete consumption will be placed along road corridors and visual sensitive areas to ensure aesthetics are maintained as much as possible.

Prescribed Fire- Low Intensity

After a light burn some of the trees left standing are killed. This detracts from the overall intent of the project. Firing should be monitored with strict oversight or not done at all. If fuel reduction is the aim of light firing, why not leave the forest unburned and wait for the possibility of a wildfire to do the job. (RM)

Consideration: Low intensity prescribed fire does kill some residual trees and usually some mortality is a desired objective of that activity. Depending on site conditions and objectives overstory mortality is usually 10% or less but could range up to 25% in some areas. This helps to further thin the forest, remove less fire tolerant trees control the densities of tree regeneration, create wildlife snag habitat and create stand and landscape variability. Although there are some short term visual effects from tree scorch and mortality the effects of this activity is far less than allowing a wildfire to burn the units.

It looks like most (if not all) of the units will include the application of low-intensity prescribed fire. In addition to area-wide stand improvements and conifer removal on south-facing slopes in particular, this will benefit big game such as elk and mule deer by increasing forage production. (FWP)

Consideration: All units will receive prescribed fire- low intensity. One of the objectives of this activity is to improve big game forage production. Thanks for the feedback.

AFRC worries that fire without mechanical treatment beforehand can be very explosive and can consume and kill merchantable timber. Consider salvage of fire killed trees. (AFRC)

Consideration: The units where prescribed fire is proposed without other prior treatments are located on dry south aspects with lower tree densities and fuels. Site specific conditions will be evaluated to ensure prescribed fire objectives can be met. Salvage logging is not proposed as part of the Piquett Creek project. Previously completed prescribed fires in similar vegetation and fuel conditions have resulted in limited overstory mortality well within the range of acceptable results.

Roads

Glad to see that no permanent roads will be built, and that care will be taken to rehabilitate temporary roads. (FWP)

Consideration: Thanks for the feedback.

Weeds
Glad to see the control of weeds post-treatment. (FWP)

Consideration: Preventing the spread of weeds is an important part of this project. The project area roads were treated last year and will be post haul. Monitoring of roads and disturbed sites will be conducted and control treatments will be used as necessary. The rehabilitation of disturbed sites with native grass of shrubs will also reduce suitable sites for weed establishment. Thanks for the feedback.

Vegetation Management
To promote more forage and early seral species needed for elk and deer, AFRC encourages the Forest to concentrate on irregular selection or regeneration harvests that space trees out to a wide distance. We suggest thinning to a 40 sq. ft. basal area of retention. (AFRC)

Consideration: Desired residual basal area will be determined based on site and stand conditions and the desired future conditions. Typically, intermediate treatments in warm dry forest types leave a basal area range of 40-60. Regeneration harvests, shelterwood cuts, seed tree cuts and clearcuts, all focus on creating size class diversity, establishing early seral species and beneficially improve big game forage. Intermediate harvests and uneven-aged treatments reduce canopy cover and often thin the forest down to a 40-60 BA for example in the warm and dry ponderosa pine forest types.

Heavy treatments are needed in the WUI and in the Bitterroot Community Wildfire Protection Plan. To facilitate these treatments both in elk habitat and in the WUI, AFRC supports creating forest openings larger than 40 acres. Patches developed by regeneration harvest would move toward naturally occurring opening size and patterns. AFRC supports creating openings larger than 40 acres and supports attaining approval by the Regional Forester (FSM 2471.1). (AFRC)

Consideration: Regeneration harvests greater than 40 acres are not authorized by this decision. Regeneration utilizing seed tree harvest up to 40 acres are proposed for areas within the project area based on existing conditions. Regeneration treatments in these areas will reduce fire behavior, address insects and disease, promote early seral species, and improve elk forage.

AFRC believes that DXP could be an effective tool in this project. The current species composition is dominated by a grand fir understory, Douglas-fir, and ponderosa pine. A desired condition for the Bitterroot Forest Plan is to have more forest dominated by ponderosa pine and Douglas-fir. AFRC believes a DXP prescription could be used over a large part of the treatment area to achieve the desired species composition and be a cheaper method for designating harvest trees. (AFRC)

Consideration: Designation by Description (DxD) and Designation by Prescription (DxP) are being utilized wherever stand conditions allow the desired end result to be met. We agree and support looking at opportunities to move away from labor intensive and costly tree marking.

Maximize Commercial Treatments
As the project continues to evolve we encourage the Forest Service to not reduce the proposed commercial units. (RC COMM)

Consideration: Opportunities to utilize commercial treatments to meet desired stand and landscape conditions will be considered to the extent authorized by the Piquett Creek DM. Although the decision allows for treatments on up to 3,000 acres, the 500 log truck load hauling restriction, required to protect

Bull Trout habitat, will limit the amount of acres that are treated commercially. Commercial treatments will be prioritized to ensure these activities provide the greatest benefit to reducing fire behavior and addressing insects and disease within the project area.

Other Feedback Topics

Grizzly Bear
Require Interagency Grizzly Bear Committee certified bear resistant products to be used http://igbconline.org/wp-content/uploads/2020/02/200220_Certified_Products_List.pdf (SS)

Manage habitat to minimize mortality to grizzly bears by providing adequate security habitat and building public acceptance of food storage and "Be Bear Aware" programs. The likelihood of achieving bear recovery goals would be improved even more by taking actions to maintain/improve habitat connectivity (mentioned earlier) and start an "inform and involve" (Be Bear Aware) educational program for G-Bears with the local public as well as contractors. (SK)

Consideration: All personnel (FS, Contractors) working on the project will be required to comply with food storage. The current design feature requires all food and garbage associated with project activities to be stored in a vehicle or other bear-proof container, although IGBC certified bear-resistant products are not required. The Bitterroot Ecosystem Outreach and Education subcommittee is currently working on methods to expand outreach and education. A Forest-wide food storage order has not yet been implanted, but Regional and Forest personnel are evaluating this approach.

Monitoring
There is value in a project specific and comprehensive monitoring plan. That would seem to be easier to track and ensure things don't slip through the cracks. Such a plan could pull elements from the activity cards but also include a timetable for monitoring and reporting. (SS)

Build a strong monitoring program into your "new approach" to project planning and implementation by incorporating published recommendations of Forest Service scientists. Suggested publications are: "Restoring fire-prone Inland Pacific landscapes: seven core principles" (Hessburg et.al, 2015, Landscape Ecology 30:1805–1835); "Strategies for Monitoring Terrestrial Animals and Habitats" (Holthausen et. al, 2005, United States Department of Agriculture, Forest Service, Rocky Mountain Research Station, General Technical Report RMRS-GTR-161); and "A Technical Guide for Monitoring Wildlife Habitat" (Roland and Vojta, 2013, United States Department of Agriculture Forest Service Gen. Tech. Report WO-89). (SK)

Consideration:
Step 8 of the implementation plan has a project specific monitoring plan based on the requirements of the Forest Plan, decision memo, and design elements within the proposed activity cards. While not specifically referenced, a number of the recommendations in Hessburg et al. (2015), Holthausen et al. (2005), and Roland and Vojta (2013) have been integrated into pre- and post-implementation monitoring, or are addressed through the project design.

Hessburg et al. (2015) lists seven core principles for restoring fire-prone Inland Pacific Landscapes. The concept for these principles involves management planning and treatment design to better incorporate natural processes, climate change, and operational limitations to management (*ibid*.). The Piquett

Creek project contains a small portion of the larger landscape picture and future projects on the Bitterroot National Forest, and the identified need is to "improve landscape resilience to disturbance by diversifying forest structure and composition, reducing fuels (scoping letter, September 10 2019)," which fits within the framework of the Hessburg et al. (2015) recommendations.
Holthausen et al. (2005) addresses monitoring strategies for terrestrial animals and habitat on a broader scale than individual forests, while Roland and Vojta (2013) produced a technical guide to help managers applicably and appropriately monitor terrestrial species within a variety of contexts (e.g. habitat attributes from vegetation composition and structure, disturbance to wildlife species from anthropogenic stressors). The pre-implementation surveys are designed to identify potential wildlife species present that trigger certain design criteria. The post-implementation monitoring is designed to ensure compliance with design criteria and applicable laws and regulations. In conjunction with other cooperators, like the Montana Natural Heritage Program, these implementation plan components are intended to continually inform response of species to landscape changes.

While the Bitterroot National Forest does not have the resources to design and implement rigorous scientific monitoring, these measures adequately use the existing data, resources, and manpower to evaluate changes to terrestrial species over time due to forest management activities. As more data is collected or obtained (i.e. LiDAR), and larger landscape scale activities are pursued, it is within the Forest Service's collective benefit to adapt monitoring programs to adequately address future changes to terrestrial species at a larger landscape scale.

Retention of Old Growth
Retain old growth trees. (RM)

Consideration: One of the goals and requirements of the project is to maximize the retention of old growth and healthy large trees. Prescriptions and treatments will be designed to retain and protect healthy large trees.

Provide sufficient acreages and patch sizes of old-growth through time by planning for replacement of existing old-growth habitat and treating fuels in the WUI and elsewhere to reduce the potential for this relatively rare habitat to be consumed by wildfire. Would also like to see you use silviculture and prescribed fire to help protect life, property and old growth habitat. This could be accomplished by not only treating stands to reduce fuels adjacent to existing old-growth, but also by reducing fuels adjacent to stands that are planned as old-growth replacement habitat. (SK)

Consideration: Current old growth was verified and stands of potential replacement old growth will be identified during stand diagnosis. One of the goals and requirements of the project is to maximize the retention of old growth and healthy large trees. Prescriptions and treatments will be designed to retain and protect healthy large trees. Depending on existing conditions a suite of non-commercial and prescribed fire treatments may be used to ensure these stands are protected from future fire or insect mortality. Current conditions put most of the ponderosa pine old growth at risk of loss should a wildfire occur.

Visuals

The view from my house and front porch is of the Piquett and Shook Mt areas. I hope the end results of the project are pleasing to view unlike other areas. (Baker Lake Road, Hart Bench/Conner Cutoff) Do your best to maintain the view. (RM)

Consideration: Visuals in this area is an important consideration for me as well. Most of the treatment units won't be visible from your house. We excluded treatment from the steep west facing area directly across from Christisen Creek. Portions of Units 14a & 14b may be visible but have been prescribed an improvement cut that will retain a fully stocked stand that blends well with the surrounding open west aspect. Although there may be short term changes to your view our ultimate goal for the area is to prevent widespread mortality from a stand replacing fire that would have long term impacts to your scenery.

Harvest Systems

Though some of the proposal area is planned for cable harvest, there are opportunities to use certain ground equipment such as feller bunchers and processors in the units to make cable yarding more efficient. Allowing the use of processors and feller bunchers throughout these units can greatly increase its economic viability, and in some cases decrease disturbance by decreasing the amount of cable corridors, reduce damage to the residual stand and provide a more even distribution of woody debris following harvest. (AFRC)

We would like the Forest Service to shift their methods for protecting resources from that of firm prescriptive restrictions to one that focuses on descriptive end-results; in other words, describe what you would like the end result to be rather than prescribing how to get there. (AFRC)

Consideration: Feller bunchers are allowed to be used for cutting within units requiring cable yarding depending on on-site soil conditions and detrimental soil disturbance levels. Site specific soil surveys will be conducted to determine which cable units can utilize mechanized cutting. Only yarding methods are restricted based on slope percentages per standards in the forest plan. Thanks for the suggestion on focusing on the end state conditions. We are working to provide flexibility during implementation but still need to adhere to specific requirements from laws, policy, regulations and the forest plan.

Whitebark

The objective for whitebark pine caught my attention. This species is in severe decline across the west. Seems to me that whitebark pine stands are so valuable that the objective should be to not disturb WB stands. The little trees that are less than 3"dbh may be the trees that are best suited genetically to deal with the blister rust and climate change. Therefore, I think all age classes of WB pine should receive the fullest protection. (SS)

Consideration: Whitebark pine is not present within the project area or areas proposed for treatments. Most of the project area is outside of suitable whitebark pine habitat. The design element was included to provide protection if individuals were discovered during implementation. We have no intention of cutting or removing whitebark pine but recognize there is a possibility for mortality of individual small trees outside of typical habitat types when implementing activities such as prescribed fire on the landscape.

Wildlife

Help ensure habitat connectivity across the landscape through time by integrating RCHA's, with wildlife security habitat, old growth retention areas and areas closed to seasonal or year-long motorized travel. (SK)

Make expected changes in wildlife habitat more understandable for the general public by improving wildlife habitat relationship modelling capability and mapping expected habitat changes over time. Suggest building on the mapped RCHA's, by creating an additional map for "Habitat Connectivity" that includes other habitat attributes, such as elk habitat security areas, seasonal or year-long road closures, areas of old growth retention, non-commercial forest land and/or inoperable terrain. Such a map would show significant gaps (if any) in habitat connectivity. For areas where connectivity is an important consideration and where connectivity gaps occur, your proposed stand prescriptions could be modified to create habitat conditions that help fill connectivity gaps and make movement easier for species needing forest cover for habitat connectivity.
(SK)

Consideration:

Current data that exists including aerial imagery and VMAP will shortly be supplemented by LiDAR datasets. The Forest has not yet integrated these datasets in addition to the datasets mentioned in the comments; however, this would be a worthwhile exercise to help develop connectivity maps that would be useful in future Forest planning. A number of species depend on connectivity for seasonal needs including foraging, shelter, and reproduction and connectivity serves to facilitate emigration and immigration into areas for genetic connectivity. The Forest strives to maintain a landscape scale approach that provides a mosaic of habitat conditions for a variety of species, while providing landscape resilience. The project activities will enhance that mosaic on the small scale, but will have negligible effects at the landscape scale. With that said, this idea will be carried forward to potentially supplement analyses in the future and provide a better context for changes occurring across the Forest.