

**Multiparty Monitoring Group (MMG)**  
**June 20, 2018, 6:00 pm to 8:30 pm**  
**Nederland Community Center- MPR Community Room**  
**Meeting Summary - DRAFT**

*Attendance:* Teagen Blakey, Marin Chambers, Clark Chapman, Y Chapman, Dennis Duckett, Mark Foreman, Angela Gee, Marielle Gerard, Wes Isenhardt, Ruben Mares, Paul McCarthy, Yvonne Short, Ted Tash, Susan Wagner, Kevin Zimlinghaus, Lisa Zucker

*Facilitation:* Heather Bergman and Dan Myers

**ACTION ITEMS**

Heather Bergman	<ul style="list-style-type: none"> <li>• Send the link to Decision Notice Page. <i>It is available here:</i> <a href="https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd549685.pdf">https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd549685.pdf</a></li> <li>• Send out dates for MMG meetings starting in September.</li> </ul>
Marin Chambers	Reach out to Vivian Long to clarify language in Avenza points for Units 43 and 24.
Kevin Zimlinghaus	<ul style="list-style-type: none"> <li>• Send out the text of the soil scientist and hydrologist’s findings on erosion in the areas of concern identified by MMG members at the May 21 meeting.</li> <li>• Send Marin Chambers the information from the hydrologist, soil scientist, and botanist to the CFRI project website.</li> <li>• Send Dan Myers this information for inclusion in this meeting summary.</li> <li>• Find text of the two Forest Plan amendments and send them to the group. <b>Note: This information is available on Page 10 of the Decision Notice; see link above.</b></li> <li>• Send the activity tracking spreadsheet to Marin to post on the project website.</li> <li>• Write the group a clear guide to treatment rules for basal area reductions regarding a unit's dominant cover type, treatment types, and the other species of trees found in a unit and its stands. Reference relevant citations in the Decision Notice.</li> <li>• Share information with the group about the impacts of clear-cuts in Unit 43 to the viewshed when that information is available.</li> <li>• Find out why some trees in Unit 24 were painted pink.</li> <li>• Ask Vivian Long about tree heights on Unit 24.</li> <li>• Consult with Ruben and provide written response to MMG input for this meeting.</li> </ul>

**WILDLIFE MONITORING UPDATE**

Dan Myers, Associate with Peak Facilitation, provided a brief update in response to the MMG’s request for more information on existing wildlife monitoring efforts on the Forsythe II project and along Colorado’s Front Range. The monitoring activities referenced were as follows:

- USFS: Forsythe II Project Environmental Assessment (EA):
  - The EA states that raptor nests will be monitored for occupancy and reproductive success until the completion of project activities. The USFS will also monitor for the effectiveness of closed features in protecting habitat.
  - The Magnolia Forest Group (MFG) submitted an alternate plan for monitoring. The alternate plan suggested that the USFS monitor prior to all treatments to see which

species are present and how the habitat that those species depend on could be improved. In response to this alternate plan, the USFS wrote that it assumes the presence of species based on the area's habitat type. The USFS reiterated that it had direction to protect raptor nests. Additionally, the USFS monitors management indicator species like elk on a forest-wide scale (but not in specific project areas). The USFS' analysis for elk in the EA's four action alternatives includes consideration of elk migration corridors and design criteria that limit project activities in important winter ranges used by elk.

- USFS: Decision Notice (DN)/Finding of No Significant Impact (FONSI): The USFS affirmed that it would monitor for raptor nests and the effectiveness of closed features in protecting habitat until the completion of the project.
- Front Range Collaborative Forest Landscape Restoration Project (CFLRP) 2017 Wildlife Monitoring Report:
  - Front Range CFLRP's Wildlife Monitoring Team identified 145 species with close correlation to the "core" Front Range CFLRP area for potential monitoring. These species were filtered based on their presence in the CFLRP's elevation range of interest (6,000 to 10,000 feet) and were then scored based on the following criteria:
    - Monitoring the species is "ecologically informative of the condition of ponderosa pine-dominated forest and has key ecological functions in this ecosystem."
    - Monitoring the species is "politically prudent" (e.g., the species as federally listed under the Endangered Species Act (ESA) or is a USFS Sensitive Species).
    - Monitoring the species has "socio-economic importance" (e.g., it is a game species or a popular watchable species).
  - Based on these scores, the species were split into three prioritized tiers for monitoring. Tier 1 included species that are monitored under an agreement between the USFS and the Bird Conservancy of the Rockies (BCR) that provides for monitoring every other summer (beginning in 2014). The Tier 1 species were: mountain bluebird, golden-crowned kinglet, olive-sided flycatcher, pygmy nuthatch, Williamson's sapsucker, hairy woodpecker, Abert's squirrel, and pine squirrel. Tier 2 species were identified for monitoring if that monitoring can be funded by CFLRP partner organizations (This monitoring has not been funded as of this meeting.). BCR and the USFS have now monitored the Tier 1 species for two full field seasons at 125 sites.

Marin Chambers, Research Associate at the Colorado Forest Restoration Institute (CFRI), discussed CFRI's monitoring role and discussed group questions about monitoring.

- CFRI typically conducts ecological monitoring on forest treatment areas.
- The MMG's identified priorities were to provide input on treatment design layouts and implementation monitoring (i.e., ensuring that the USFS is doing what it said it would do). This is called implementation monitoring and different from ecological monitoring.
- At the MMG meeting in April, the group discussed whether or not to pursue ecological monitoring on the Forsythe II project. The group decided to leverage CFRI's existing monitoring efforts in Boulder County for other CFRI projects. CFRI is willing to explore placing some of those monitoring sites in the Forsythe II treatment area, but will not do so until Spring/Summer of 2019.
- CFRI does not have wildlife monitoring expertise. CFRI staff reached out to Colorado Parks and Wildlife (CPW) and Boulder County Parks and Open Space (BCPOS) to ask about their

wildlife monitoring efforts in Boulder County. Both agencies confirmed that they are not conducting wildlife monitoring on the Forsythe II treatment area. CPW and BCPOS are doing coarse monitoring of large ungulates like elk, but this does not necessarily cover Forsythe II.

- BCR and the USFS will be gathering baseline data and then review it following treatment to see how Tier 1 species are affected by CFLRP treatments. This is just an example of existing wildlife data.

### ***Clarifying Questions***

MMG members asked several questions about wildlife monitoring and CFRI's general wildlife monitoring practices. Questions are indicated in italics with responses below in plain text.

*What other types of monitoring data are available? For example, is there monitoring data on surface fuels?*

CFRI is collecting that sort of ecological information pre-and-post treatment. It will then analyze that data on behalf of its funders. CFRI aims to provide an understanding of the baseline ecological data and comparative analysis of that data after treatments.

*Does CFRI monitor human species?*

CFRI conducts ecological monitoring. It does not monitor humans or their use of treatment areas.

*Will any of this monitoring data have an impact on Forsythe II treatments? For example, will it show what species were wiped out by cutting?*

The USFS does not expect to wipe out any species by cutting. Monitoring reports and summaries are published annually. These reports show the results of treatments as they relate to forest cover and habitat types and attempt to establish correlations between those elements. However, note that monitoring data from one part of the Front Range is not entirely applicable elsewhere in the region because of the specificity of each forest treatment. For example, if monitoring data shows that the Pike-San Isabel National Forest has thinned 80% of the basal area of a forest unit and the population of Abert's squirrel has fallen there, the USFS will take that into account for its work in Nederland. At the same time, that is not entirely applicable to the Nederland context because the USFS is limited to thinning 50% of basal area in the Forsythe II area. Additionally, note that CFRI's pre- and post-treatment collection of data informs an adaptive management process. Monitoring data and results are a resource for the adaptive management process, where the USFS and other treatment implementers can tweak their current and future prescriptions based on newest available information.

*How does monitoring relate to other priorities such as protecting watersheds from high-severity wildfires? How does the USFS decide which is more important?*

The USFS has four objectives for this project; none of these are specific to wildlife. However, USFS resource specialists help develop design criteria that determine how close treatments can come to stream corridors, for example. Wildlife is part of a healthy forest, but the USFS is not managing for them explicitly as part of this project.

*What data is the USFS collecting on plants?*

The USFS is now gathering plot data and will soon transcribe that into an inventory of forest structure, species composition, basal area, etc. The USFS is collecting data on some plant associations, but it does not measure all of those. The USFS relies on data from CPW and the maps that Marin Chambers created from Boulder County data for previous MMG meetings to see where species are generally located.

## USFS UPDATES

Kevin Zimlinghaus, Forester with the USFS, provided an update on the USFS' response to MMG feedback and a summary of recent field visits and their outcomes.

- Zimlinghaus provided written responses to input recorded in the notes for the April MMG meeting. He has begun to do so for the May meeting, but these are not yet complete. Generally, however, concerns from the May meeting centered around the potential presence of old-growth forest on Unit 74. MMG members submitted Avenza points that indicated that flammulated owls might be present in that area.
- Zimlinghaus, USFS wildlife biologist Ruben Mares, and two other USFS biologists visited the Unit 74 area to examine the features pointed out by members of the MMG via submitted Avenza points. The USFS team determined that there were large trees and some characteristics of old-growth habitat in the area, but these features were centered in drainages (where the USFS is not permitted to conduct treatments). The Arapaho and Roosevelt National Forest Plans include criteria for staff to use to determine what is and is not old-growth forest. There could be components of old-growth forest in Unit 74, but the USFS team could not determine whether the forest was old-growth or not. In any case, the USFS decided to "pull" the boundary of the treatment zone farther from the drainage because of the potential presence of old-growth forest in the drainage area. The USFS will treat upslope areas of Unit 74. The team located the potential flammulated owl nest cavity but could not confirm that a flammulated owl was present. In the future, the USFS suggests that MMG members submit Avenza points for the presence of flammulated owls based on the presence of more than just a potential cavity (e.g., feathers, droppings, etc.) because USFS personnel have limited time to check potential nesting sites. The area that the cavity was found within is in potential flammulated owl habitat. The USFS' wildlife biologists conduct flammulated owl surveys periodically.
- The portion of Unit 74 that MMG members indicated may be old-growth has a different structure and tree size than identified old-growth does. If the USFS does find old-growth in Unit 74, it can only manually thin small trees in the habitat to reduce ladder fuels.
- Based on the feedback it has received and the direction in the Decision Notice, the USFS will avoid treating riparian areas. In addition to conservation concerns, the USFS expects that treating drainage areas would be labor-intensive and costly.
- Impacts to private land from runoff can be reviewed by the USFS on a site-specific basis. For example, a USFS soil scientist and a hydrologist recently did a walkthrough of areas where MMG members are concerned about erosion, including the USFS' land above one group member's property. The scientists determined that the area is stable as a forest setting. Also, the resource specialists evaluated erosion with the potential treatment area. That area possesses extensive ground cover, so the scientists did not expect the treatment to increase the risk of off-site erosion. The resource specialists said that they would be concerned about the effects of the treatment on erosion if it were a mechanical treatment, but the unit(s) in question will be treated manually. Addressing the root causes of erosion on a site-specific basis could be effective but changing treatment locations will not necessarily address those concerns. Flashfloods occur more frequently after wildfires, but these treatments will not exacerbate the resulting overflow and erosion.
- The resource specialists also examined a drainage off of Valleyview Drive, which includes houses near the southern end of Unit 1. The resource specialists identified a gully feature that appeared to have channeled water during past flooding events.
- The USFS asked its botanist if the orchids in the area were sensitive. The botanist replied that these orchids are fragile and at risk of extirpation, but they are not on the USFS' protected species list. The Forsythe II project includes a design criterion to protect soil that

will have the added effect of protecting these species. The botanist does not expect these orchid species to be federally listed as threatened or endangered. Their regional populations are secure. Zimlinghaus offered to provide this correspondence with the hydrologist, botanist, and soil scientist to CFRI to post on the project website or through other media that the group prefers. CFRI suggested adding another page to the project website with information from the USFS' resource specialists. This information will also be added to this meeting summary.

- The USFS also followed up on a previous MMG discussion about relocating a treatment polygon from the southeastern side of Unit 2 to its northwestern corner, where two landowners might be amenable to allowing the USFS to treat part of their defensible space. The USFS has not yet contacted these landowners, but it could place a polygon there that meets the Design Advisory Team's (DAT's) identified priorities. The new polygon would have been difficult to see from town.
- When examining erosion concerns near the MMG member's property, USFS personnel also observed that thinning the mixed conifer forest on the elevated "bench" in that area could also be modified to reduce visibility from town. The USFS will lay out that unit next month. The unit may be a stop on the MMG's field trip.
- The USFS has developed a spreadsheet to track all treatment activities taking place at any given time in any given Forsythe II treatment unit. The USFS will share this with CFRI to post on the project website.

### ***Clarifying Questions***

MMG members asked several questions about the USFS' updates. Questions are indicated in italics with responses below in plain text.

*How extensive has the USFS' climate change analysis been? Does it account for each tree?*

No. The USFS has used climate change science to estimate what the parameters and effects of a warming climate could be on the landscape. For example, drought-tolerant species will probably remain on the landscape in greater numbers than less drought-tolerant species. Lodgepole pine will move up mountain slopes, and mixed conifer trees will fill in the area it vacates if climate change comes to fruition.

*What has the impact of the USFS' burning and cutting been on carbon emissions? The questioner had heard that the Forsythe II project would produce more carbon emissions each year than the annual amount of carbon that Boulder County aimed to emit.*

The impact is unclear. USFS staff working on the Forsythe II project have not done this sort of analysis.

*What are the USFS' general concerns for wildlife in the Forsythe II project area? Someone from the USFS was supposed to amass data on wildlife to inform the Forsythe II prescriptions. What happened to that data?*

It is difficult to say anything general about concerns for wildlife. Prescriptions are the result of feedback from each of the USFS' resource specialists, including a wildlife biologist. When developing prescriptions, the USFS considers species that have been identified regionally and in the Forest Plan. Some species may be positively impacted, and some may be negatively impacted by each treatment. However, there will be no overall, net-negative impact on the population of a given species.

*How many species would be impacted by a high-severity wildfire?*

That depends on the intensity and extent of the fire. Fires that strike homogenous species areas (like stands of lodgepole pine) are more damaging than those that strike areas with a wider range of species.

*Has Arapaho and Roosevelt National Forests Supervisor Monte Williams signed two USFS amendments concerning wildlife?*

Those amendments would have been a part of the National Environmental Policy Act (NEPA) process and should be included in the Decision Notice.

*Will the USFS try to be explicit about what it is doing as it responds to input from the MMG?*

The USFS might not have the capacity to be explicit about all of the determinations that it made for each unit and why, but the USFS will convey basic information to the group in response to input it receives.

*Would the thinning of the "bench" area replace the patch-cut below it in the USFS' treated acreage?*

No. The Decision Notice allows USFS personnel to patch cut 4.5 acres and to implement other prescriptions in up to 30% of the total acreage within the unit area. This is most applicable in lodgepole pine-dominated stands. That said, the USFS is not permitted to cut mixed conifer inclusions less than one-half acre in size within a lodgepole pine-dominated unit, for example. In this case, the USFS can thin mixed conifer or aspen aggregations within a unit identified with lodgepole pine as the dominant cover type in addition to the patch-cut areas up to the 30% of the total unit acreage. Most of the additional aggregations that the DAT proposed in addition to the patch cuts were aspen, but that group also identified a ponderosa aggregation near a spring and another on a ridge for thinning.

*If a lodgepole unit can receive other prescriptions on up to 30% of the treatment area, does that mean 30% of the treatment area is being treated in total or is that in addition to the lodgepole?*

Up to 60% of that acreage could be treated. The USFS can match the treatment of 30% of the lodgepole pine patch cuts with 30% of the area with other cover type aggregations, as applicable and described under the cover type prescriptions. The USFS can treat up to 60% of the acreage (patch cuts and other cover type aggregations and the respective prescriptions), but that does not mean that they will. The USFS can meet the acre target caps (i.e., 30% of a unit's acreage in lodgepole pine) as outlined in the Decision Notice, but they can treat more than that when it makes sense to do so while meeting the objectives of the project. This is allowed within the Decision; it is on Page 5 of the Decision Notice.

### **Group Discussion**

The MMG discussed the USFS updates.

- A group member said that one of the two amendments that Forest Supervisor Monte Williams made to the Forest Plan was added because the USFS realized that the Forsythe II project would reduce wildlife habitat. USFS staff did not remember there being an amendment related to wildlife habitat but did recall one concerning interior forest. The USFS offered to find the amendment texts and send them to the group.
- A group member said that under the Boulder Valley Comprehensive Plan (BVCP), wildlife must be protected at all costs.
- The group decided that if the USFS' time constraints require it to choose between responding briefly to all feedback or providing more detailed replies to frequently discussed issues, the MMG prefers the latter option. The USFS team is reviewing each unit to

try to put together a summary of general feedback, particularly topics that are included in the Forsythe II design criteria such as not cutting trees of certain sizes.

- An MMG member suggested that Avenza points of elk scat locations, for instance, could be used to identify high populations of certain animals in a given area. The group member does not expect the USFS to comment on every pile of scat.
- The USFS has committed to responding to MMG input by saying what can or cannot be done as part of the Forsythe II treatments and why. Possible reasons for a certain treatment change being unworkable include feasibility, terrain, or general disagreement with the proposal.
- A group member said that they had believed that the meadow near the MMG member's property would be added to the treatment area. This group member also identified some hummingbird nests for the USFS to avoid treating in that area.
- A group member stated the Town of Nederland needs to address erosion from the road near the MMG member's property.
- A group member said that the DAT's directives state that the treatments should avoid the removal of ponderosa and spruce trees. The group member said that that the DAT had asked the USFS to treat the additional 30% of the treatment area. In response, the USFS said that it could remove ladder fuels from ponderosa aggregations. These treatments will never reach 50% of basal area. The USFS will continue to develop its response detailing what treatments will look like and how they will be adapted based on MMG and DAT feedback.

## **REMAINING PHASE 2 UNITS**

The MMG discussed the remaining units in Phase 2. MMG members, CFRI staff, and the USFS reviewed submitted Avenza points and key themes from each unit on physical maps provided by CFRI.

### ***Units 45 (East), 49, and 73***

- MMG members marked wildlife trails on these units; scat can provide a general picture of where animal populations can be found.
- In general, the space between south and north slopes on these units is flatter, cooler, and wetter. MMG members found a lot of elk scat there, and it seems that elk like this habitat. MMG members recommended that the USFS thin those areas less and instead thin more on south slopes to meet basal area targets. Similarly, there are shady, wet areas in the northeastern part of Unit 73 that should be thinned less so that there is sufficient cover for elk.
- A USFS biologist noted that the areas with scat are probably the easiest places for elk to travel. However, these units are quite large, and it is hard to capture population trends on the landscape level using Avenza points. If a treatment occurred in one place, the elk would probably move somewhere else. The biologist noted that it is difficult for USFS staff to cover the entirety of these units so that staff will take this input on elk activity into consideration. MMG members should consider elk populations at the landscape scale when providing this input, but the more information that MMG members provide to USFS biologists, the more they can say about elk concentrations in the area.
- Unit 73 consists mostly of dense ponderosa that will be thinned. The potential flammulated owl cavity was found on one of the unit's upslopes. The USFS stated that Unit 73 is denser than it should be on its south-facing slopes. The USFS has observed areas here that were once dominated by ponderosa but are now being encroached upon by Douglas fir in the absence of fire. Douglas fir will not be as resilient to climate change as ponderosa. In the absence of fire, Douglas fir should be removed.

- Unit 74 is an area that the USFS could potentially treat less.
- MMG members marked the tops of some drainages for the USFS to review. Group members did not walk the entire drainage. MMG members also marked an aspen stand for enhancement.
- There is a lot of downed material in this area. MMG members would prefer that this downed be piled and burned. The USFS would like to remove the downed material but doing so is expensive, and the USFS cannot broadcast burn the area.
- There have been several mountain lion kills on these Units. Mountain lions are not mentioned in the EA or the DN. Group members would like more information about the historical response of mountain lions to these types of treatments.
- The north-central portion of Unit 73 could be thinned less.
- A group member requested that the USFS preserve large swaths of cover in areas where elk and mountain lions are present. The group member stated that 100 feet of buffer for coverage is insufficient. In response, a USFS biologist stated that the treatments would still leave cover for predators and ungulates. The USFS' wildlife biologist will be consulted by the treatment team about what needs to be considered before treatment. Accordingly, this input is helpful for the USFS' biologists. It can inform modifications to treatment boundaries. The USFS will not just ignore the presence of mountain lions. Providing this kind of input is a key purpose of the MMG.
- An MMG member said that a USFS wildlife biologist mentioned in the EA that wildlife had been squeezed into narrow corridors near Kelly Dahl and Nederland by 2014 clear cuts. The group member suggested the USFS maintain a balance between cover and forest openings across treatment areas. The USFS said it would not maintain more cover in the Forsythe II area to account for larger cuts in Kelly Dahl and elsewhere. The group member said that the USFS wildlife biologist had said clear cuts had been so extensive on the western end of Magnolia that the emphasis in that area now should be on maintaining cover.
- The USFS said that it could maintain cover on north slopes, but there are too many trees on south slopes, and they need to be thinned. Mountain lion kills will be found in the area, but the habitat is expansive. The USFS said that MMG members had provided information that their observations indicate are diminished, but there are probably new species and vegetation present in treated areas as well. West Magnolia and other past treatment areas probably now host species that were not previously present.
- The southwestern arm of Unit 73 is steep, and a group member said that it did not leave many areas to cut. The USFS said that that area would be treated manually, even though it is in Phase 2, which largely consists of mechanical treatments. The USFS will transfer some sub-aggregations to manual treatment. The USFS will walk the units to identify the need for manual treatment. Portions of Unit 49 may be treated mechanically.
- Units 73 and 48 have areas of skinny ponderosa pine that seems suitable for thinning. However, the USFS noted that if those areas are thinned, it will be easy for snow loads to knock over the remaining trees. It might make more sense to clear the area to let trees regrow altogether.
- There are golden eagles in the Twin Sisters area and one in Boulder Canyon.
- MMG members marked some knolls, but not all of the ones that they could have marked—there are a lot of knolls out there. The USFS noted that the design criteria for knolls is intended to protect larger knolls.
- There is mistletoe among the ponderosa and some Douglas fir at the southern end of Unit 49.
- A group member asked if the USFS would remove downed material from Unit 74. The USFS said that this would not necessarily be the case. The treatment of Unit 74 was originally

intended to be carried out in two stages, but the USFS is now considering treating it all at once instead of burning the slash piles, which could scorch the overstory. Units designated for mechanical treatment will utilize equipment to bring downed material to a landing site. For manually treated units, the USFS will work to minimize the potential for erosion.

- The USFS will treat up to 40% of Douglas fir on these units' south slopes, but not on north-facing ones. The USFS may remove up to 50% of ponderosa from south slopes. The primary determination for doing so will be identified cover type. If one of these units does not have the cover type that the USFS initially identified there, the USFS will discuss its treatment options.
- The USFS noted that allowed basal area reductions include all of the trees in an area with a given cover type, not just the dominant species. This means that the USFS can cut trees other than ponderosa in a ponderosa-dominant unit, for example. The USFS could patch-cut Unit 74, but it includes many mixed conifer stands that are better suited to thinning. The USFS may do some patch-cutting in addition to thinning in an area. The USFS will cut 40% of basal area but will generally leave ponderosa intact.
- The USFS said that it can cut lodgepole-dominant units in aggregate up to 30%, 40% for Douglas fir, and 50% for ponderosa. This means that if a stand is entirely lodgepole, it could be cut to contribute to the 50% of total cuts for a ponderosa-dominant unit. However, thinning of ponderosa in a lodgepole-unit does not count toward basal area targets because patch-cuts are a different class of treatment. The USFS will work with the facilitator to better explain this in plain language.

#### ***Units 39, 42, 75, 76***

- There are rocky outcrops in the northeastern portion of Unit 39. These may be in a defensible space zone. The USFS has not received permission from landowners to treat this area yet.
- A stream in the southeastern part of the unit has massive ponderosa pine above the cut limit. However, adjacent trees may serve as ladder fuels. MMG members who walked the area did not recall seeing much undergrowth.
- The USFS will treat Units 42, 75, and 76 manually.
- There is limber pine in the east-central portion of Unit 76 mixed with dense lodgepole. The USFS said that it favors limber pine in treatment and would leave it.
- There is unique cryptogammatic soil with lichen or fungi on the southern end of Unit 76. The MMG requested the USFS not disturb that soil.
- The USFS generally does not cut mixed conifer within lodgepole patch cuts. However, it will not leave an individual spruce tree by itself in the center of a patch cut for fear that it will blow down. The USFS is more liberal with maintaining ponderosa on the interior of patch cuts so that the ponderosa can seed a patch-cut. Ponderosa is generally sturdy in the wind. By contrast, Douglas fir has more biomass in its crown, so it sometimes tilts and falls in wet soil. The USFS prefers to keep Douglas fir as edge trees for this reason rather than leave them in solitary units. This allows Douglas fir to seed-cast from the edge of clear cuts to their interiors. The USFS tries to leave limber pine on the edge of cuts because it is prone to tipping.
- There is "dog-hair" forest in the middle of Unit 76. This would be good to cut.
- The western arm of Unit 75 includes well-spaced, larger trees that MMG members would like the USFS to leave.

### ***Units 43 and 68***

- There was some confusion because the northern curve in the boundary of Unit 43 appeared to be far too close to a house. The USFS explained that its mapping program might have missed the buffer zone. The USFS will shift the boundary down to provide the home with the standard 300-foot buffer.
- There is an open area in the center of Unit 45. The USFS could thin the understory of the Douglas fir in the area. The forest seems quite healthy.
- The USFS said that it would probably do more thinning than patch-cutting in the area depending on how the trees are arranged. It could leave those trees as they are, but this depends on the density of trees, the rockiness of the area, and how feasible it would be to get machinery into the area.
- In general, the USFS prefers to cut lodgepole over Douglas fir, and Douglas fir over ponderosa. Lodgepole is usually cut; the USFS could thin some in relation to other lodgepole, but concentrations of lodgepole are patch cut. This counts toward overall basal area requirements.
- There is some well-spaced, average-sized ponderosa pine in the southwestern portion of Unit 43. The USFS could thin some of the regenerated vegetation there, which could function as ladder fuel.
- There is spruce along the drainage in the southwestern part of Unit 43. The USFS could promote aspen in that area as well.
- The USFS could thin lodgepole in the northeast of Unit 68. That area is steep, so the USFS will evaluate whether it should be treated manually or mechanically.
- There is a cluster of large lodgepole in the northeastern portion of Unit 43. The lodgepole is dense and includes young Douglas fir. There are large ponderosa and spruce trees to the northeast of this area. The USFS will check to see if there is a drainage in the area.
- The USFS said its landscape architect would assess the impacts of patch cuts to viewsheds, but thinning treatments do not have identified viewshed design criteria. There will be patch cuts on this unit near Unit 76, but the USFS does not know the specifics of these cut and their impacts on the viewshed yet. It will share this information with the MMG once it is known.

### ***Unit 24***

- The MMG proposed that the USFS place a patch cut between the road and power lines on this unit. However, the USFS said that doing so would create larger snow drifts on the road. A group member noted that the shade from the trees currently in the center of the road might cause snow to stay there longer than it otherwise would. Some group members said that there had not been problems with snow from similar clear cuts on Magnolia Road. The road on Unit 24 is maintained by the county and serves as a school bus route. The USFS said that snow is a reason that it would not want to cut the trees in the center of the road. The area in the middle of the road is less than one acre.
- The lodgepole is denser below the road on the eastern end of the unit. The road itself serves as a potential fuel-break that could become effective if it was widened.
- There was concern that the south-central area of Unit 24 is well-spaced and should not be patch cut.
- The area northwest of Unit 24 is defensible space and probably cannot be treated. This constrains treatment options.
- There are some trees marked with paint on the northern portion of the Unit. A group member wondered about the meaning of the ribbons and paint colors on trees in this unit. The USFS said that trees might have been painted pink to take an inventory of tree volume.

Orange indicates a boundary, and double-painting indicates where a turn in the treatment boundaries occurs. This unit has not been painted yet. These may be old marking remnants from the Forsythe I project that were designated for a timber sale.

- The northeast of the unit has a well-spaced canopy. MMG members would not like the USFS to patch cut there.
- The USFS needs to cut almost five acres in this unit. MMG members suggested cutting nearer to the road in the south-center of the unit and the southeast portion of the unit beneath the road. Additionally, there are some dense, young, regenerated trees in the south-central portion of the unit suitable for thinning. The USFS will examine these possibilities the next time it visits the unit.
- An MMG member suggested scalloping the treatment boundary just below the road in the center of the unit.
- There are aspens in the northwest of the unit above the road. Removing conifer there could modify fire behavior.
- Feathering or scalloping some cuts on the southwestern corner of the unit could give it a more natural look. The USFS could move a patch-cut toward the center of the unit to remove some dense trees from a slope.
- A group member asked if someone from the MMG or USFS could get in touch with the homeowners northwest of Unit 24 to see if they would be amenable to the USFS treating their defensible space. The USFS said that if it could find out who the homeowners were, it would pursue that.

#### **NEXT STEPS**

- Those who were attending their first MMG meeting can contact Heather Bergman with any questions. Peak will answer them or get them to the USFS.
- The MMG field trip is on July 21. Peak will provide more information.
- MMG members are encouraged to visit any units that they wish to in August. MMG members can send any comments that they have on these units to Heather so that she can relay them to Kevin.
- Input on any units will still be considered, although input from earlier in the process will be more impactful.
- Any MMG members who know the home-owners northwest of Unit 24 should reach out to Kevin or Peak.
- This is the last MMG meeting until September. Heather will coordinate with Angela Gee on her schedule and send out meeting dates for the fall.