

**Forsythe II Multiparty Monitoring Group (MMG)**  
**May 8, 2019, 6:00 PM to 8:30 PM**  
**Nederland Presbyterian Church**  
**Meeting Summary – FINAL**

*Attendance:* Paul Alaback, Teagen Blakey, Chad Buser, Marin Chambers, Tania Corvalan, Lynne Diebel, Mark Foreman, Angela Gee, Dave Gustafson, Kristopher Larsen, Ed LeBlanc, Mark Mendonca, Yvonne Short, Susan Wagner, and Kevin Zimlinghaus

*Facilitation:* Heather Bergman and Dan Myers

**ACTION ITEMS**

<b>Teagen Blakey</b>	Send Marin Chambers an email with points of interest in the mixed conifer field trip area so that she can provide/create a corresponding map.
<b>Teagen Blakey and Kevin Zimlinghaus</b>	Identify a route, time, and necessary supplies for the June mixed conifer field trip.
<b>Marin Chambers</b>	<ul style="list-style-type: none"> <li>• Make a poster of the Google Earth image of the project area for the July meeting.</li> <li>• Make a map with points of interest in mixed conifer units for field trip if necessary.</li> </ul>
<b>Kevin Zimlinghaus</b>	<ul style="list-style-type: none"> <li>• Coordinate with fire agency representatives to ensure that at least one such representative can attend the July meeting.</li> <li>• Add columns to the master list for the current average basal area density per unit, the target basal area density range per unit, a short explanation for each target basal area density range, and the outcome in basal area density.</li> <li>• Bring the lodgepole versions of the maps used at the May meeting.</li> </ul>
<b>Peak Facilitation</b>	<ul style="list-style-type: none"> <li>• Send date and location information for the Landscape Restoration Team (LRT) Jam Session in September to MMG members.</li> <li>• Update the 2019 MMG work plan.</li> </ul>

**GROUND RULES**

The facilitator reviewed the ground rules for MMG discussions. They are as follows:

- Allow every voice to be heard
- Participate in the discussion
- Help ensure that everyone feels safe in the discussion
- Treat everyone with respect
- Talk about what you think and know; let others do the same
- Listen to understand, not to respond
- Focus on the topic at hand

**REVIEW OF THE UPDATED 2019 WORK PLAN**

MMG participants reviewed and discussed the updated work plan for 2019. Their comments are summarized below.

- At the April meeting, MMG members discussed the possibility of holding cover type-specific in-room meetings and corresponding field trips during the upcoming summer. Tonight's meeting will address landscape-scale concerns and values for mixed conifer and ponderosa cover types, and the group will take a field trip to yet-to-be-determined mixed conifer and

ponderosa units on Saturday, June 22. On Monday, July 22, the MMG will have an in-room meeting to discuss landscape-scale lodgepole pine concerns and values, and the group will go on a field trip to yet-to-be-determined lodgepole units on Wednesday, August 14.

- On Wednesday, September 11, MMG members will hold an in-room meeting on landscape-scale wildlife concerns and values and will participate in a Saturday, September 14 field trip to yet-to-be-determined units with features that inform those concerns and values. The group will also use the September 11 meeting to discuss cumulative impacts to the landscape from other projects that affect the area's forests. The Arapaho-Roosevelt National Forests will soon have a new wildlife biologist, Aurelia DeNasha, and she should be ready to participate in the process by this date. Although this meeting will focus on wildlife issues, those issues can be expected to arise at other meetings as well.
- On Wednesday, October 9 and Wednesday, November 20, the MMG will discuss specific units with these landscape-scale discussions in mind. To avoid potential disruptions from government furloughs, the MMG will use its Wednesday, December 18 meeting to help the US Forest Service (USFS) develop bid packages for treatment contracts to be submitted in February or March of 2020. If this cycle of meetings goes well, the MMG will repeat the process for future phases of the Forsythe II project next year.
- Peak Facilitation Group will write a meeting summary of the June 22 field trip for any group members that are unable to attend. Peak will also provide directions for reaching and navigating the units on that field trip so that group members can take self-guided tours of the units on their own time.
- Three MMG members have submitted roughly 70 Avenza points for Phase 4 in advance of the original May 11 deadline to submit points. They noted that many of the comments they submitted were general observations rather than specific geographic points. Other group members may want more time to provide Avenza points to the USFS, so the USFS has extended the final deadline for providing input to June 30. Colorado Forest Restoration Institute (CFRI) will process those points in time for discussion at the July 22 meeting.
- The MMG can continue to adjust the work plan as needed when possible.

#### **LANDSCAPE-SCALE DISCUSSION: MIXED CONIFER AND PONDEROSA PINE**

MMG participants discussed landscape-scale values and concerns relating to mixed conifer and ponderosa pine cover types. Their conversation is summarized below.

- Peak Facilitation Group provided a handout summarizing key landscape-scale values identified by the MMG and USFS at the November and April meetings, respectively. Peak will bring this handout to each in-room meeting for reference, and participants can add to it as they wish.
- The facilitator encouraged participants to work to meet each other's goals where possible.
- The USFS provided maps of the Forsythe II units by cover type and a bar chart summarizing the prevalence of each cover type on the landscape.
- MMG members asked the USFS to discuss the rationale behind its treatment plans for mixed conifer and ponderosa units with a view toward reintroducing fire to the landscape.
- "Mixed conifer" refers to Douglas fir and ponderosa pine trees. Pinon-juniper does not constitute mixed conifer (there are only 18 acres of pinon-juniper in the project area). Douglas fir and ponderosa constitute roughly 70% of the vegetation in the project area.
- In the past year, the USFS has updated these cover type maps to more accurately reflect the impacts of past treatments like the Winiger project in the Forsythe II project area.
- There are not enough areas in which limber pine is a single component for it to appear on the cover type maps. Limber pine is a subordinate component of mixed conifer.

- The USFS stated that (across all cover types) mechanical treatments do the best job of meeting the most of the project's objectives that involve removing trees. However, there are common limitations to mechanical treatments on the landscape, including insufficient average tree size, rock outcrops, the presence of drainages and watercourses, challenging topography, high treatment cost, lack of available roads, and private property access issues.
- There were questions as to how the USFS decides that tree removal will help reintroduce fire to a given area. The USFS stated that removing trees can reduce potential wildfire severity in wildland-urban interface (WUI) areas and can help to restore mixed conifer species on the landscape. The USFS wants to restore mixed conifer, aspen, and meadow cover types to reflect historic forest conditions and to prepare the forest to cope with future climate change (mixed conifer species are more drought-tolerant than lodgepole). Modifications to the originally proposed action for the project may impact the USFS's ability to reintroduce fire.
- MMG members requested that the USFS use more specific quantitative measures for reducing or enhancing certain cover types so that the group can effectively monitor the changes in those cover types and their effects. Group members also requested information as to how the USFS determines the size of basal area reductions for each cover type.
- Among other sources, the USFS drew on General Technical Report (GTR) 373 and studies conducted by the USFS's Rocky Mountain Research Station (RMRS) on historic conditions in lower montane ecosystems while designing its treatment plan for the Forsythe II project. GTR 373 could serve as a rough checklist for MMG members to use in assessing the efficacy of treatments based on the USFS's goals for the project.
- USFS staff have been involved in the learning process with the Front Range Roundtable (FRRT) since 2005. Discussions with the FRRT have yielded insights related to stand density goals for restoration and the historic balance of tree clumps and openings on the landscape. The FRRT includes scientists and land managers from the Colorado State Forest Service, CFRI, Colorado Parks and Wildlife, The Nature Conservancy, and The Wilderness Society, among others. The FRRT's Landscape Restoration Team (LRT) is holding its annual science and monitoring review meeting in September. Peak Facilitation Group will provide MMG members with the date and location for that meeting in case they want to attend. CFRI also has monitoring reports on the Forsythe II project website that provide more information on the evolving scientific understanding of landscape-restoration goals.
- Mechanical treatments are more expensive than manual treatments because of the high cost of transporting logs to disposal sites or mills. Manual treatments are cheaper because the wood can be piled and burned on the ground without being removed.
- At an October 2017 MMG field trip, the USFS said that its goal was to reduce basal area by 30-60% in ponderosa units and 60-80% in Douglas fir units. The MMG and USFS have had past discussions about whether reducing basal area density by the same percentage overall has the same effect in units that start with different basal area densities. Reducing basal area densities across the landscape by the same amount maintains heterogeneity.
- The USFS determines basal area density by conducting two step transects per acre in advance of contracting. Crew members pace for 105 feet, stop, assess the average basal density for the half acre in question, and do the same for the other half of a given acre. Step transects are effective in capturing heterogeneity in each unit.
- The USFS's basal area reduction targets (which have been lowered since 2017) are sufficient to reintroduce fire to the landscape on Units 40, 41, and 46 (near Gross Reservoir). However, in other units (e.g., 39, 43, 45, and 77) the USFS is concerned by Douglas fir capturing ponderosa pine areas on south aspects because Douglas fir is less

resistant to drought in the face of a changing climate. The USFS prefers completing more intense mechanical treatments to remove Douglas fir in those areas.

- The USFS agreed to add the following columns to the master list of treatments spreadsheet: the current average basal area density for the unit, the target range for average basal area density in the unit, the average basal area density range for each unit, and a brief description of why the USFS set a given range. The MMG could do implementation monitoring on a sample of those column values using the USFS's methodology.
- The USFS can more easily reintroduce fire to areas that have been treated manually at least once. USFS fire personnel are comfortable using prescribed fire in areas that burned in the late 1990s and early 2000s, but they cannot do so in areas with too many fuels where they would not be able to secure a line and protect residents or where they would violate regulations on smoke levels. Climate change is also expanding the elevation and vegetation types where fires can burn, with unpredictable results.
- MMG members stated that they were not opposed to pretreatment and agreed that reintroducing fire to the landscape is a good goal for the USFS. They also stated that surface fuels are a critical component of fire risk and that logging increases surface fuels on the landscape.
- There were differing perspectives as to how trees should be removed to reduce fire risk. Some participants expressed support for removing trees strategically to better fight fires along geographic boundaries, while others recommended thinning as much as possible in defensible space and forested land.
- There were questions as to whether fire personnel preferred to treat dense, unhealthy doghair forest as opposed to larger, well-spaced trees. Fire personnel typically prefer to treat ladder fuels to prevent fire from burning through the canopy and causing spot fires that outpace firefighting efforts, but those determinations are site-specific and based on the adjacent values at risk.
- From a silvicultural perspective, the USFS prefers to maintain heterogeneous levels of ladder fuels, because removing all ladder fuels will not allow the forest to perpetuate itself.
- The USFS had some planned treatments in mixed conifer areas near the top of Boulder Canyon (which is of particular fire concern to some residents), but those have been scaled back. It is also difficult to treat that area because it includes a mix of private lands, but the USFS hopes to treat across more boundaries in the area in the future.
- There were suggestions that the MMG could gauge the effectiveness of treatments by monitoring the amount of surface fuels on the ground. CFRI may be able to do some of that monitoring as part of its work for the Forests to Faucets program near the project area, but CFRI staff stated that the monitoring would probably show that decreases in crown fire risk often accompany increases in surface fuels and noted that there have been disagreements in the group as to which creates more fire risk.
- Scientific literature and analyses of treated areas that are burned with prescribed fire indicate that the resulting surface fuel levels and fire risk are highly variable based on the heat of the burn and the initial conditions on the ground.
- There were suggestions that the USFS should focus on removing surface fuels without cutting down trees in healthy stands. There was disagreement about how best to treat lodgepole units. Some participants favored patch-cutting lodgepole to reduce fire risk and allow firefighters to better position themselves. Others questioned whether doing so would help firefighters if flammable surface fuels and windthrow remain in the resulting patch cuts.
- MMG members stated that there are areas near Nederland where neither fire mitigation goals nor the human need for peaceful places are best served by patch cuts.

- From a wildlife perspective, the USFS considers whether mechanical or manual treatments are more appropriate in interior forests based on several factors, including habitat type, forest structure, and limiting factors for key species. The Forsythe II project includes requirements for keeping 40% of crown closure. Generally, wildlife biologists want to maintain the microclimate of interior forests as much as possible and maintain habitat connectivity for wildlife across the landscape.
- MMG members stated that they have a goal of minimizing thinning in interior forest areas.
- Limiting factors like social trails and difficult access across private lands prevent the USFS from treating some areas of interior forest. In some cases, the USFS needs to pretreat interior forest areas to reintroduce fire and maintain, for example, old-growth trees and sensitive goshawk habitat that would be harmed by severe wildfire.
- MMG members said that they preferred manual to mechanical treatments in mixed conifer areas because they do less damage to the soil and forest and are cheaper.
- The mixed conifer units in the project area will all be thinned, not clear-cut. Mechanical treatments can leave more structural diversity in mixed conifer forests, and manual treatments leave more wood on the ground.
- Firefighters' preference for pile-and-burn or lop-and-scatter treatments depends on nearby values at risk (homes, watersheds, wildlife, etc.), aspect, and plan for future prescribed fires. Firefighter and public safety are the top concerns for firefighters. Contiguous canopy cover makes fighting fires safely and effectively difficult.
- A severe wildfire in the Forsythe II project area could pose a significant threat to the Boulder Canyon road. Flooding risk varies by cover type: flooding in dense lodgepole pine with no understory leads to severe erosion, and flooding in mixed conifer with more understory leads to less erosion.

#### **NEXT STEPS**

- Teagen Blakey and Kevin Zimlinghaus will work to plan (route, supplies, meeting spot, duration, etc.) the June 22 field trip to mixed conifer units, potentially departing from Unit 39.
- The USFS will continue to follow up with residents about unburnt piles on the ground.